

Command and General Staff Officer Education for the 21st Century: Examining the German Model

**A Monograph
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Abstract

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Education has been the foundational cornerstone to every profession and continues to be so in the 21st Century. As a profession, the military is obligated to conduct not only training but also education of the keepers of the profession, the officer corps. Since the rise of large military bodies enabled by the *levee en masse* and industrialization, armies have required educated officers skilled in both command and staff functions. The Prussian-German model of staff officer education embodied in the *Kriegsakademie* of the Nineteenth and first half of the Twentieth Centuries, was highly regarded and much copied. The education officer received at the *Kriegsakademie* directly contributed to an efficiently organized and employed Prussian-German Army at the tactical and operational levels. The investment in *Kriegsakademie* officer education paid huge dividends at Gravelotte-St Privat and Sedan 1870, Tannenberg 1914, Battle of Poland 1939, and the Battle of France 1940, critical first battles.

With the rearming of Germany in 1955 came the need for the fledgling *Bundeswehr* to educate general staff officers. This need was met by establishing the *Führungsakademie* (German Armed Forces Command and Staff College). The *Führungsakademie* was created with the same time honored principles that had served general staff officer training previously: careful selection of the most highly qualified and promising officers and a broad based education rigorously applied.

However, little information on the current *Führungsakademie* Education System is available in the English language. This monograph attempts to address this void. The author conducted research and interviews with the faculty, staff, and students at the *Führungsakademie* in Hamburg, Germany in order to understand and assess the education given to German general staff officer aspirants. The central general staff officers education course is the National General/Admiral Staff Officers Course. The subject of this investigation focuses on five key areas of the *Führungsakademie* Educational System as it is implemented in the National General/Admiral Staff Officers Course: student selection, curriculum, educational methodology, faculty, and post education concepts. An overview of the German officer education and training system and a brief description of the current German General Staff System are also included.

The mechanism to evaluate the *Führungsakademie* Educational System was derived from the United States Chairman, Joint Chiefs of Staff, Program for Accreditation of Joint Education (PAJE) evaluation standards. The six developed criteria form the basis for evaluating the *Führungsakademie* and assessing its educational capability against established American joint education requirements. The findings conclude that the *Führungsakademie* meets the majority of requirements for joint professional military education accreditation. In many cases, the *Führungsakademie* exceeds the established American standards and more appropriately educates and prepares field grade officers for their command and staff duties than do American command and general staff courses.

Areas where improvements could be made in the American intermediate level and advanced studies programs based on the *Führungsakademie* research are listed as recommendations in the final section of the monograph.

If the United States desires professional, well-educated, and capable field grade officers to meet the command and staff challenges required to win America's first battles of the 21st Century, it would do well to look to certain aspects of the *Führungsakademie's* Education System model.

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CHAPTER ONE

INTRODUCTION

With the age of industrialization and the birth of modern warfare came an increased requirement for officers educated in the profession of arms. Officers who received their commissions by virtue of their societal positions with no further specialized education were on the decrease. This new requirement for officers with specialized military education spread across countries and learned professionals soon populated both staff and command positions. By the mid 1800's, Prussia had established the Great General Staff as well as troop staff positions. Officers who had been carefully selected and rigorously educated at the *Kriegsakademie* populated these positions. Much importance and indeed responsibility was placed on the graduates of the *Kriegsakademie* both in Berlin and in the field forces.¹

Germanic success in many “first battles” at the tactical and operational level points to the importance and strength of the general staff system and its supporting foundation of the *Kriegsakademie*. The victories at Gravelotte-St Privat and Sedan 1870, Tannenberg 1914, Battle of Poland 1939, and the Battle of France 1940 are tangible evidence of the success of German armies at the operational level, armies staffed and commanded by *Kriegsakademie* graduates.

The changes facing Prussian-German military in the century between 1840-1940 were dynamic to say the least. The advances in transportation, communications, weapons, tactics, economics and politics where among the challenges to be faced and conquered. The staff officer education enabled officers to think about, learn about, and in many cases successfully take advantage of the daunting changes that the military was to experience.

¹ Buchholz, Arden. *Moltke, Schlieffen and Prussian War Planning*. Providence, RI: Berg Publishers, Inc., 1993, 37, 48, 138, and 225. In 1850 there were sixty-four trained general staff officers, nineteen of whom served in Berlin on the Greater General Staff (GGS), the remaining serving in Troop General Staff (TGS) as corps and divisional chiefs of staffs or assistant chiefs of staff. By 1866, the number had grown to 101 with forty-six serving in Berlin on the GGS and fifty-five in the TGS with the corps and divisions. By 1893, there were approximately 600 general staff officers and by 1913, the GGS had nearly reached its wartime compliment of 650 general staff officers.

The importance of professionally educated officers was not lost on the new *Bundeswehr*. The institution that would become the present *Führungsakademie* was established in 1957. The new *Führungsakademie* founded on several key elements that were key to previous Prussian-German military staff officer education. These key elements were the selection of highly qualified officers with proven abilities in troop command and of impeccable character, the teaching of a balanced curriculum containing both general and military specific topics combined in a rigorous and multi-venue educational environment.² The resulting product was to be an officer thoroughly educated for both command and staff duties in ever more responsible positions.

Like the Prussian-German military of the aforementioned century the American military faces many new and rapidly developing technologies and ever changing geopolitical environments. The need for highly erudite officers—thoroughly educated in theory, history, geopolitics, economics and joint service doctrine—to meet the challenges of the 21st Century is a certainty according to former Chairman, Joint Chiefs of Staff General Henry R. Shelton.³

This monograph will investigate the current German *Führungsakademie* Educational System.⁴ Beginning with the historical overview of the Prussian-German Staff Officer education the reader will be familiarized with establishment of professional military education in the form of the *Kriegsakademie*, the German officer education up until the end of World War II, and the founding of the *Führungsakademie*. Following this, the main emphasis of the monograph is presented in the form of a detailed investigation of the current *Führungsakademie* Education System. This investigation includes the key elements of student selection, curriculum, educational methodology, faculty, and post education concepts.

² Ibid., 22-31. Millotat, Christian O.E., *Oberst i.G. Understanding the Prussian-German General Staff*. Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 20 March 1992, 7-18.

³ Shelton, Henry H. "Professional Education: The Key to Transformation." *Parameters*, Autumn 2001: 4-16.

⁴ "Führungsakademie Education System" in this paper is used to describe the entire grouping of related, interacting, and supporting programs, elements, personnel, and ideas inside and outside the *Führungsakademie* that support, develop, enable, promote, influence, and aid officer instruction, learning, and development within the *Führungsakademie* National General/Admiral Staff Officers' Course environment.

In an attempt to measure the merit of the *Führungsakademie* Educational System, an evaluation methodology was derived using standards established by the United States Chairman, Joint Chiefs of Staff. The standards formulated in order to provide a basis of evaluation are detailed. In the following chapter, these standards are applied to the *Führungsakademie* in order to determine the *Führungsakademie* Educational System strengths and weaknesses. This analysis then establishes the foundation for the final chapter where recommendations for the improvement of American intermediate level professional military education are included. No comparison with existing US military education systems will be made as this comparative analysis lays outside the scope and focus of this paper.

The US military and the US Army should carefully analyze the goals of its future officer professional education system. The increasingly popular proposals to move away from generalist officer education at the intermediate level towards specialist training may not achieve the desired abilities for its officers. The complexity of future system of systems will require officers who understand how to integrate, control, and lead diverse and multifaceted organizations. This investigation of the *Führungsakademie* Education System may provide a better understanding of that system's strengths and serve as an important counterbalance against the move towards specialization of officer education. This counterpoint maybe an essential element as Department of Defense (DOD) and the respective services decide how best to modify American professional military education to meet the demands of the 21st Century.

The imperative now more than in the past to successfully win “first battles” is loud and clear. There may not be a second battle given the speed, lethality, and cost of future military operations. Thus, America must have the best educational system in place to contribute its share of producing results—victories in our “first battles.” By carefully investigating the *Führungsakademie* Educational System insight into ways to better educate those officers who will lead in command and staff positions and increase the likelihood of success in the next “first battles” will be gained.

CHAPTER TWO

THE PRUSSIAN-GERMAN GENERAL STAFF OFFICER EDUCATION SYSTEM HISTORICAL OVERVIEW

To understand more clearly the present day *Führungsakademie* Education System certain knowledge of the history of Prussian-German staff officer education is helpful. With this in mind, this chapter is dedicated first to an overview of the history of the staff officer education before World War II. Following this, the present *Führungsakademie* history is reviewed in order to set the context of the current *Führungsakademie* Educational System.

The beginnings of staff officer education in Prussia date to 1765 with the establishment of the *Academie des Nobles*.⁵ Frederick II (the Great) saw the need to educate the officers who advised him on military matters. The limited nature of staff officer duties and requirements in the Prussian Army for the next nearly forty years saw little educational development despite the formation of this school. By 1801, Napoleon era warfare had demonstrated that war had become more complex. Permanent staffs were now an essential requirement to handle both everyday staff duties as well as assist the commander during battle. The need for well-trained staff officers became apparent in the Prussian Army as well. To that end, General Gerhard Johann Scharnhorst established the forerunner of what would become the *Kriegsakademie*, the *Militärische Gesellschaft* (military society) in July 1801.⁶ This organization was formed by officers interested in the reform of the Prussian Army. By 1804, the Academy for Young Officers was opened.⁷ Scharnhorst's goal for the school was to provide a broad education to officers who were en route to both the newly formed General Staff as well as troop officers. A critical need had arisen in Scharnhorst's eyes; that of providing highly skilled officers as advisors to the less than competent

⁵ Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 172.

⁶ Walter Görlitz, *History of the German General Staff: 1657-1945* (New York: Praeger, 1953), 17.

⁷ Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 172.

commanders.⁸ The defeat of Prussia by Napoleon at the battles of Jena/Auerstadt in 1806 again focused the need for dedicated staff officers thoroughly educated in military art and science.

This need brought about the establishment of an institution that would endure for nearly one hundred and fifty years. On 15 October 1810, the *Allgemeine Kriegsschule* (General War School) began classes for staff officers.⁹ The establishment of student selection standards and a broad based curriculum were foundations that Prussian-German staff officer education would retain up until the present time.¹⁰ During the first several decades of the General War School's existence, such luminaries as Carl von Clausewitz served on the faculty.¹¹ By 1823, the school was conducting a three-year long course, a standard that lasted until the First World War.

The final victory against Napoleon and the subsiding of the military reform movement brought a decreased interest in and attendance at the *Allgemeine Kriegsschule* in the remaining years of the first half of the Nineteenth Century. However, the school gained a new prominence under the direction of General Eduard von Peucker who directed a number of curricular reforms.¹² It was Peucker's idea that the school become "not just a professional school, but a university, the seat of higher military learning that would originate new ideas and spread them

⁸ Trevor N. Dupuy, *A Genius For War: The German Army and General Staff, 1807-1945* (Englewood, NJ: Prentice-Hall, 1977), 25. Dupuy quotes from Scharnhorst, "But we can at least give them capable assistants. Thus the General Staff officers are those who support incompetent generals, providing the talents that might otherwise be wanting among leaders and commanders."

⁹ Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 172.

¹⁰ Ibid., Officers required a minimum of five years of service and the high recommendation from their commanders to even be allowed to take the entrance test. The ten-day examination tested students' knowledge and served as the basis for selection of the most capable officers to begin the course of study. Martin van Creveld, *The Training of Officers: From Professionalism to Irrelevance* (New York: The Free Press, 1990), 23. Military subjects as well as mathematics, physics, chemistry, and foreign languages were included in the school's syllabus.

¹¹ Walter Görlitz, *History of the German General Staff: 1657-1945* (New York: Praeger, 1953), 60-61. Von Clausewitz eventually became the director of the school, 1818-1831.

¹² Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 142 and 173. General Peucker was appointed Inspector General of Military Training and Education in 1854 by Frederick Wilhelm IV.

throughout the army.”¹³ These changes brought both an increased prestige and increased respect for the school. To herald these changes, the school was renamed the *Kriegsakademie* in 1859.¹⁴

By 1871, the contributions of trained staff officers to the victories over Denmark (1864), Austria (1866) and France (1870/71) had established the value of the *Kriegsakademie* within the Prussian-German Army. The capabilities of the general staff officer that aided the victories on the battlefield were directly tied to the *Kriegsakademie*. Several key elements helped the *Kriegsakademie* achieve its desired goal of preparing highly skilled staff officers well versed in the art and science of war.

First was the selection of officers to attend the *Kriegsakademie*. An officer desiring to attend the *Kriegsakademie* was required to obtain an endorsement from his regimental or battalion commander attesting to the aspirant’s demonstrated capabilities.¹⁵ After obtaining this endorsement, the applicant was required to successfully pass an academic examination covering a wide variety of subjects.¹⁶ The results of the test in conjunction with the commander recommendation were used to select the officers who would be admitted to the *Kriegsakademie*. By the early 1900’s, only twenty percent of the 800 applicants were selected for admission to the *Kriegsakademie*.¹⁷ As author Martin van Creveld puts it, the *Kriegsakademie* “was able to attract the *crème de la crème*.”¹⁸ This exacting selection process continued throughout the *Kriegsakademie*’s existence and remains a key element in the *Führungsakademie* system.

¹³ Martin van Creveld, *The Training of Officers: From Professionalism to Irrelevance* (New York: The Free Press, 1990), 26.

¹⁴ Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 173.

¹⁵ Ibid., 185. The officer’s commander had to confirm that the aspirant had “1) a distinguished practical service and superior aptitude, 2) a serious inclination toward academic training along with the corresponding abilities, 3) the personality and character necessary for the prospective employment in the higher positions in the army, 4) strong health and the desire to maintain it and, 5) a sense of financial responsibility.”

¹⁶ Ibid., 187. Subjects on the entrance examination developed and administered by the *Kriegsakademie* faculty entrance board included: formal tactics, applied tactics, arms and ordnance, fortifications, field intelligence, technical drawing, history, geography mathematics, and foreign language.

¹⁷ Martin van Creveld, *The Training of Officers: From Professionalism to Irrelevance* (New York: The Free Press, 1990), 27.

¹⁸ Ibid., 27.

The second key element in the *Kriegsakademie's* success was its curriculum. While Peucker's goal of making the *Kriegsakademie* into a university that would raise the intellectual level of the army as a whole was not to be realized, the ability to provide a solid education to future staff officers was. This education was significantly broader than the training of purely military tactics, techniques, and procedures. The tension to train tacticians and managers versus educate leaders with a deep understanding of both the art and science of war remained an element of the *Kriegsakademie* throughout its existence. The diversity of the subjects taught militated against those who desired trained technocrats and favored those who were proponents of a broader based education.¹⁹ A quick sampling of subjects demonstrates the breadth of the curriculum. In 1871, the curriculum included: tactics, military history, mathematics, physical geography, French, experimental physics, history of literature, history of philosophy, chemistry, and general staff service.²⁰ (See Appendix 1 for a comparison of classes)

In addition to the high entrance standards and broad curriculum, the *Kriegsakademie* ensured high academic standards were maintained. By the conclusion of the three-year course only a third of the entering class remained. Those unable to achieve acceptable standards returned to troop duty. At the completion of the final year of study, students were required to pass a final examination. The results of this final examination determined the officer's overall rating. Approximately the top third were qualified for service on the *Grosser Generalstab* (Great General Staff), the remaining were qualified as general staff officers with troops.²¹ Thus, by means of a highly selective entrance program, a broad and rigorous three-year academic curriculum, and exacting final examination the *Kriegsakademie* was able to produce staff officers capable of meeting the demands placed upon them by senior commanders.

¹⁹ Buchholz, Arden. *Moltke, Schlieffen and Prussian War Planning*. Providence, RI: Berg Publishers, Inc., 1993, 23.

²⁰ Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 176-177. This is a partial listing of subjects for the three-year course.

The *Kriegsakademie* produced an ever-increasing number of qualified staff officers. General Helmuth von Moltke inherited sixty-four general staff officers when he became Chief of the General Staff in 1857. By the end of the Franco-Prussian War in 1871, there were 135 general staff officers, and by 1888, there were 239.²² By the beginning of World War One, there were more than 600 qualified general staff officers in the German Army.²³ The hundred years of the *Kriegsakademie*'s existence saw many changes in both the Prussian-German Army as well as the staff officer education system. The next thirty years saw even more.

The defeat of Germany in World War I spelled the end of both the German General Staff and the *Kriegsakademie*. The Treaty of Versailles formally abolished both.²⁴ However, the staff officer education continued under the leadership of General-Colonel Hans von Seeckt, Chief of the Army Command.²⁵ The *Truppenamt* (Troop Office) served as the de facto Great General Staff after the Treaty of Versailles. The *Truppenamt* oversaw the administration of general staff officer education, which had been relocated to each of the *Wehrkreise* (Military Districts).²⁶ In the *Wehrkreise* approximately ten percent of the applicants passed the entrance examination and were admitted to the *Führergehilfenlehrgang* (commander's assistants' course). Once admitted to the course, the students commenced on studies that mirrored the pre-war *Kriegsakademie* first and second academic years. Upon the completion of the second year, the top third of the students were selected to receive the third and final year of instruction under the direct tutelage of the *Truppenamt* in Berlin.²⁷ By 1935, the Treaty of Versailles prohibitions were a thing of the past and the rearming of Germany had begun in earnest. The *Kriegsakademie* reopened in October

²¹ Ibid., 192-193. Officers qualified for duty on the Great General Staff remained on probation for a further two years. Officers not qualified for the Great General Staff returned to general staff officer positions within divisions and corps.

²² Walter Görlitz, *History of the German General Staff: 1657-1945* (New York: Praeger, 1953), 96.

²³ Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 193.

²⁴ Martin van Creveld, *The Training of Officers: From Professionalism to Irrelevance* (New York: The Free Press, 1990), 27.

²⁵ General-Colonel is a four-star general.

²⁶ Martin van Creveld, *The Training of Officers: From Professionalism to Irrelevance* (New York: The Free Press, 1990), 28.

1935. Previous traditions continued; high entrance standards, a broad curriculum and academic rigor. The lone American army officer to attend and graduate from the *Kriegsakademie* between the World Wars noted that there were four mandatory elements required of a general staff officer as he solved complex problems in war. They were: 1) logical combat thinking, 2) good tactical judgment, 3) timely and aggressive application of principles and, 4) seizure and maintenance of the initiative.²⁸ These characteristics were in evidence in most of the tactical and operational level operations conducted by the German Army in World War II.

The *Kriegsakademie* continued to train staff officers throughout World War II. The course was reduced to six months in an attempt to meet the severely increased demand for trained staff officers. However, the course stabilized at eighteen months long by 1943.²⁹ Again, on all fronts in World War Two, German General Staff officers would prove themselves of value both as commanders and as staff officers. However, with Germany's defeat both the German General Staff and general staff officer training in the form of the *Kriegsakademie* ceased to exist. These two elements would remain dormant in Germany for a decade.

The reestablishment of the German military in 1955 brought with it the need for professional staff officer education. To meet this need the *Heeresakademie* (Army Academy) was founded on 15 May 1957.³⁰ On 1 October 1958, the school moved to its present location in Hamburg, Germany and was renamed the *Führungsakademie*. Once in Hamburg, the *Führungsakademie* began its service as the general staff college for all three German Bundeswehr services: *Heer* (Army), *Luftwaffe* (Air Force), and *Marine* (Navy). The *Führungsakademie* as stated by German

²⁷ Ibid., 28.

²⁸ Albert C. Wedemeyer, "German General Staff School" (Leavenworth, Kansas: US Army Command and General Staff School, 1938), typescript. Major Wedemeyer attended the *Kriegsakademie* 1936-38. At this time, the *Kriegsakademie* was a two-year course. Major Wedemeyer went onto be a key strategic planner with the Army War Plans Department in 1940-42. He then was then sent to the China-Burma-India Theater where he served on the staff of Admiral Lord Louis Mountbatten. General Wedemeyer retired as a four-star general.

²⁹ Martin van Creveld, *The Training of Officers: From Professionalism to Irrelevance* (New York: The Free Press, 1990), 28.

³⁰ Christian O.E. Millotat, *Oberst i.G., Understanding the Prussian-German General Staff System* (Carlisle Barracks, Pennsylvania: Strategic Studies Institute, 1992), 7.

Bundespräsident, Roman Herzog, “is the central and foremost training institution for all officers of the Bundeswehr-its students represent the future elite in terms of performance....The college acts at the interfaces of politics and the armed forces, of science and practice, of education and qualification, between national and international tasks.”³¹ The *Führungsakademie* has developed and matured in the past fifty years.

Currently, the *Führungsakademie* not only conducts the German National General/Admiral Staff Officer Course (GSOC) but also conducts the Field-Grade Officers Qualification Course, International General/Admiral Staff Officer Course, Armed Forces Command Course, Higher Headquarters Staff Course, and numerous Advanced Education Seminars.³²

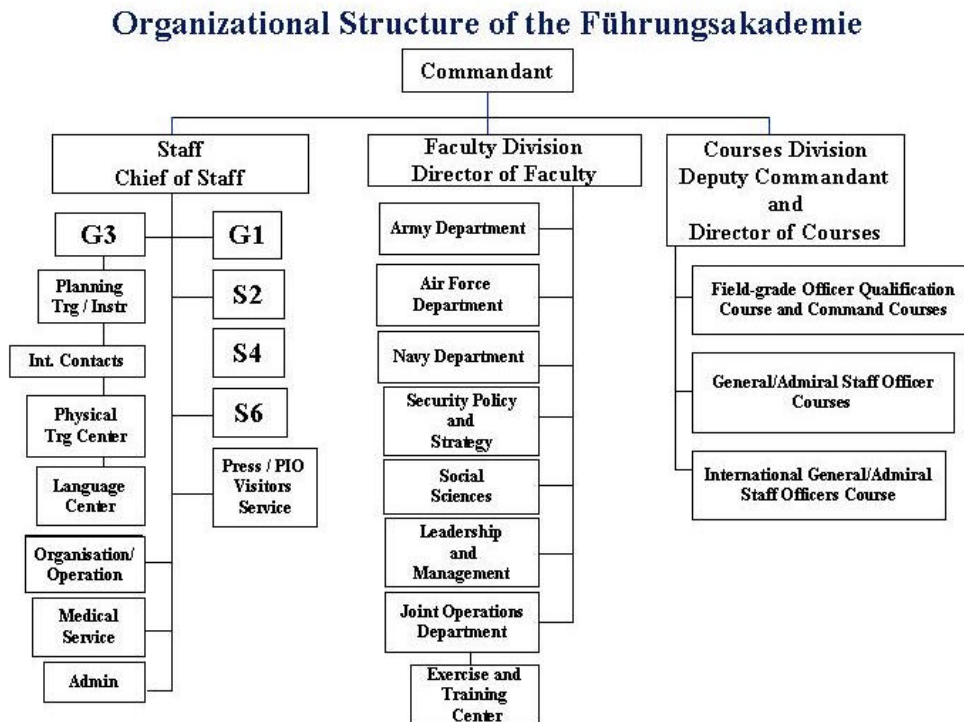


Figure 1³³

³¹ *Führungsakademie der Bundeswehr*, Welcome Packet given to visiting guests, November 2001. From a speech given by President Herzog, 11 December 1996

³² Marschall, Oberstleutnant i. G., “*Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98* (Hamburg, German: *Führungsakademie der Bundeswehr*, 1998) [PowerPoint Presentation].

³³ Ibid., Chart adapted from PowerPoint Briefing.

The portion of the *Führungsakademie* responsible for conducting the GSOC is composed of seven departments and several supporting agencies. The three service departments, army, air force, and navy, are responsible for service training and education. The Department of Security Policy and Strategy is responsible for security policy and military strategy, as well as armed forces concept, mission, structure instruction. The Department of Leadership and Management covers general leadership and management theory as well as leadership communications, judgment, and learning theory. The Department of Social Sciences teaches the elements of social sciences to include economics, legal sciences, state-society-military relations, and international systems.³⁴ The Joint Operations Department is responsible for all joint military education and training at the operational level as well as the Training and Exercise Center where exercise simulations are conducted.³⁵

The two-year GSOC is administered by over 110 military and more than twenty permanent civilian faculty and staff. Critical to the quality of courses taught at the *Führungsakademie* is the contribution of over 400 guest lecturers a year.³⁶ Thus, with the infrastructure, and the faculty/staff the *Führungsakademie* seeks to educate the *Bundeswehr*'s staff officers.

The *Führungsakademie* focuses on educating and training “modern field-grade officers who, based on sound expertise and a value-oriented attitude, effectively fulfill their duties while being at the same time self-confident representatives of the *Bundeswehr* in society.”³⁷ The following chapter describes the *Führungsakademie* Educational System and how it goes about trying to achieve this goal.

³⁴ *Führungsakademie der Bundeswehr*, Welcome packet given to visiting guests, November 2001.

³⁵ *Oberst i.G.* Winfried Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview 27 Nov 2001. The Joint Operations and Training Department was established in 1998. The new training and exercise center was completed in 1999.

³⁶ *Führungsakademie der Bundeswehr*, Welcome packet given to visiting guests, November 2001, 2.

³⁷ Marschall, *Oberstleutnant i. G.*, “*Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98* (Hamburg, German: *Führungsakademie der Bundeswehr*, 1998) [PowerPoint Presentation]

CHAPTER THREE

CURRENT *FÜHRUNGS*AKADEMIE EDUCATION SYSTEM³⁸

The general educational philosophy for National General/Admiral Staff Officers Course (GSOC) at the *Führungsakademie* can be described as a small, select student class instructed by a highly qualified cadre of officer and professional instructors. These instructors guided by the curriculum strive to provide a comprehensive education through a wide variety of academic subjects in a variety of learning venues. The educational environment structure demands high quality results from the students and as a result produces officers with intellectual and leadership capabilities who are able to perform in an outstanding manner throughout the wide range of staff and command positions within the German Armed Forces and multinational forces.³⁹

Five key elements are embodied within the educational philosophy found at the *Führungsakademie* GSOC and frame the *Führungsakademie* Education System. These key elements are: student selection, curriculum, educational methodology, faculty, and post education concepts. This chapter will investigate these five areas and in doing so provide an overview of the *Führungsakademie* Educational System.

The *Führungsakademie* education system is but one part of the whole German military establishment, albeit a very important one. To better understand and appreciate the education components a brief description of the Bundeswehr officer system is required. The major components that affect the *Führungsakademie* system are the overall officer training system and the General Staff system. The *Führungsakademie* can be viewed as a bridge between these two

³⁸ “*Führungsakademie* Education System” in this paper is used to describe the entire grouping of related, interacting, and supporting programs, elements, personnel, and ideas inside and outside the *Führungsakademie* that support, develop, enable, promote, influence, and aid officer instruction, learning, and development within the *Führungsakademie* National General/Admiral Staff Officers’ Course environment.

systems and integral to both. The first section will give an overview of the German officer education and training system and will be followed with a brief description of the current German General Staff System. Following these overviews the *Führungsakademie* Education System will be explained in detail.

German Officer Education and Training System

The Germans take a fundamentally different approach to early officer training than many other western militaries and certainly a very dissimilar approach than the American military. The difference lies mainly in two areas, pre-commissioning training and command/staff training. The pre-commissioning training traces its lineage back to the officer candidate system implemented by Elector Friedrich Wilhelm.⁴⁰ While modified from its original form, the system continues to have two central pillars. The first pillar is the enlisted/junior officer skills training the cadet officer receives. The second pillar is the officer aspirant's civilian and military general education.

After accession,⁴¹ the officer cadet goes through eight months of basic military training, the same basic training as conscripts receive. Then, the officer candidate receives two four-month blocks of officer training. Between these blocks is an internship period during which the officer candidate serves as a leader and instructor in a basic training unit. Upon successful completion of the officer training blocks, the officer candidate serves seven months in a unit within his designated branch. During this period, the candidate serves as an assistant platoon leader. The next step is a six month officer's course. This is followed by a five month tour of duty as a

³⁹ Brigadier General (Retired) Huba Wass De Czege, interview by author, 31 Mar 2002. General Wass De Czege stated that by far the best staff officers in the North Atlantic Treaty Organization that he had worked with were *Führungsakademie* trained German officers. School of Advanced Military Studies educated officers where the only ones he thought superior to *Führungsakademie* officers. General Wass De Czege rated German General Staff officers as better educated than US Army officers who had only attended the Command and General Staff Officers Course.

⁴⁰ Moncure, John. *Forging the King's Sword*. (New York: Peter Lang, 1993), 29. The first Prussian cadet school was formed in Berlin in 1645. The establishment of this and three other schools by Elector Friedrich Wilhelm firmly established the cadet officer system.

platoon leader. Early in this five month period, the officer cadet is formally commissioned as a second lieutenant. Having successfully completed the cadet training and troop time, the new officer begins work on the second pillar of his officer education, the civilian/military education.

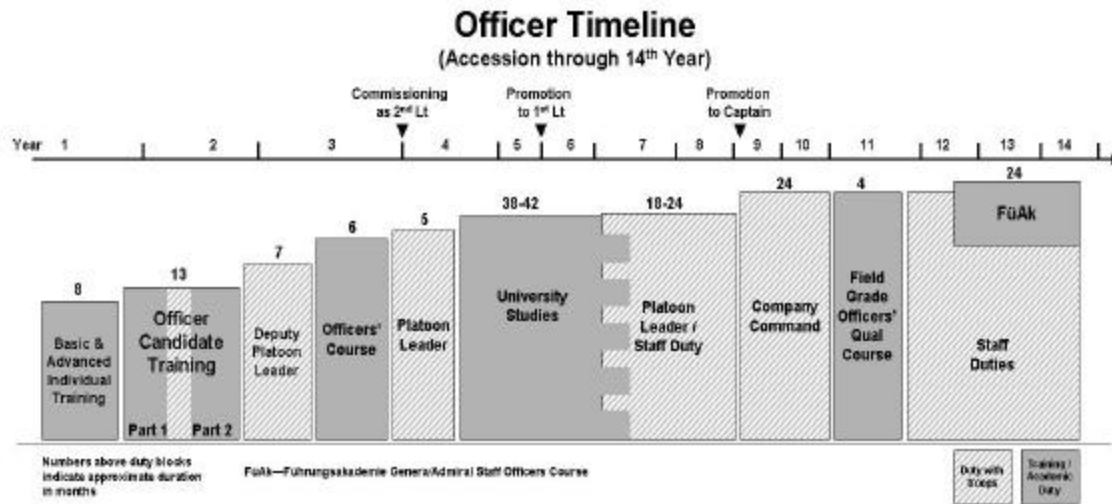


Figure 2⁴²

The young lieutenant attends one of two Bundeswehr Universities. Here he completes a normal civilian university degree in one of several fields.⁴³ During the three and one quarter years of university study, the officer has limited interaction with troops and very few non-academic responsibilities. Approximately half way through his university studies, the officer is promoted to first lieutenant. Following university graduation, the officer returns to duty in either troop leading or staff positions within his assigned branch to gain the required knowledge, experience, and skills for promotion to captain.

⁴¹ The training described is for German Army officer candidates. Air Force and Navy officer training follows closely but has service specific variations.

⁴² Marschall, Oberstleutnant i. G., "Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98 (Hamburg, German: Führungsakademie der Bundeswehr, 1998) [PowerPoint Presentation].

Table derived from PowerPoint Briefing.

⁴³ Ibid. Attendance of at a military university became mandatory in 1974. Both Bundeswehr Universities, one in Munich and one in Hamburg, are controlled and funded by the German Federal Ministry of Defence. The education authorities of Bavaria and Hamburg control the academic curricula and graduation requirements. Cadet officers receive free tuition and military pay while attending. Academic majors offered include: social sciences, humanities, economics, engineering sciences, and sports sciences. Typical time required to gain a degree, equivalent to an American masters degree is approximately 3 1/4 years.

Promotion to captain occurs when the officer has approximately eight and a half years of military service. With this promotion, he becomes eligible for unit command. Command of a company generally occurs during the ninth and tenth years of service. At the beginning of the eleventh year, the officer becomes eligible to attend the three and a half month long Field Officers' Qualification Course⁴⁴ conducted at the *Führungsakademie*. This course is one of the critical parts of the selection process for attendance of the *Führungsakademie* General/Admiral Staff Officers' Course.⁴⁵ After completion of the Field Officers' Qualification Course, the officer returns to unit duty in a staff position. Within approximately six to nine months after completing this course, the officer receives notification as to whether he has been selected to attend the FüAk GSOC. Those officers not selected continue in various non-general staff and command position throughout the rest of their career.⁴⁶ This then is the normal officer career progression during the first twelve years within the Bundeswehr officer training and education system.

German General Staff System

Prussia/Germany has employed the general staff officer system for nearly three centuries. To a large degree, the general staff system used by the Bundeswehr follows the historic Prussian/German construct. Generally, the current German General Staff system can be viewed as being supported by three central pillars.

The first is the domination of the general staff officers within the hierarchy of the Bundeswehr. By regulation, key billets are reserved for and require general staff officers to fill

⁴⁴ Ibid. Officers study Security Policy and Strategy, Social Sciences, Leadership and Management, and Army, Air Force, and Navy doctrine.

⁴⁵ Hereafter, *FüAk* GSOC

them. This ensures that general staff officers are the majority of senior commanders and key leaders within the military structure.⁴⁷

The second pillar is the selection and education of a small percentage of highly qualified officers to become general staff officers. The education of these selected officers is the central function of the *Führungsakademie*. A significant key to staff officer success is their education. This education enables them to perform to the required level in the key command and staff billets within the Bundeswehr and multinational command and staff billets.

The third pillar is the self-governing conducted by general staff officers. General staff officers perform this function through the selection of future general staff officers, maintaining responsibility for educating these officers, and the promotion and assignment of general staff officers.⁴⁸ These three pillars directly support the German General Staff System and in turn the entire German Bundeswehr as well. The following section describes in detail the second of these three pillars, specifically the German General Staff education embodied within the *Führungsakademie* Education System.

⁴⁶ *Oberstleutnant* i.G. Jörg K.W. Vollmer, German Army, AY 2001-2002 Advanced Operational Art Studies Fellow, Fort Leavenworth, KS and previous Director, Exercise Branch, *Bundeswehr Führungsakademie*, Hamburg, Federal Republic of Germany, interview by author, 28 Aug 2001. *Oberstleutnant* Vollmer noted that officers who do not attend the *Führungsakademie* General Staff Officers' Course are eligible to command at battalion and brigade levels. While their chances are nevertheless reduced, the possibility for command, especially of combat support and combat service support units, still exists for highly qualified officers. Non-graduates will generally continue in staff and other non-command duties throughout the rest of their careers.

⁴⁷ *Oberst* i.G. Helmut Muhl, German Army, German Army Liaison to the Combined Arms Center, Fort Leavenworth, Kansas, interview by author, 26 Nov 2001. Key command and staff billets are designated as general staff billets and require, by regulation, a general staff officer in them. For a certain percentage of these billets, waivers may be granted to non-general staff officer who meet critical specific job requirements enabling them to hold these positions. However, these billets continue to be general staff officer required billets and do not revert to non-general staff billets after a non-general staff officer serves in them.

⁴⁸ *Oberstleutnant* i.G. Jörg K.W. Vollmer, interview by author, 28 Aug 2001. General staff officers are separated from other branches and in effect are their own branch. They are promoted separately and a general staff officer assignment office controls all general staff officer assignments.

***Führungsakademie* Education System**

By definition, the *Führungsakademie* Education System is complex system composed of many different parts. In order to give a clearer and useful understanding of the *Führungsakademie*, the following six key areas will be examined: student selection, educational philosophy, curriculum, educational methodology, faculty, and post education concepts.

Student Selection

The high standards of the general staff depend to a large degree on the selection of its future officers. The belief that quality officers educated to high standards lead to highly capable commanders and highly effective staff officers has long been held by the German armed forces. This continues in the present system. A comprehensive selection process is employed to ensure that the appropriate officers are selected to receive general staff officer education.

A central board within each service administers the selection process. The service chief of staff (e.g. Army Chief of Staff) heads the annual selection board. Senior general staff officers comprise the other members of the board. Three elements comprise the objective and subjective criteria upon which the selection of officers who will attend the *Führungsakademie* is based. The first element is the Field Grade Officers' Qualification Course performance report.

During the three and a half month qualification course, students take two oral and two written examinations. These academic evaluations combined with their other course performance evaluations are used to generate an overall evaluation of the officer's performance. The qualification course evaluation is one of the indicators on the potential that officers have for future general staff service. The second selection element is the officers bi-annual evaluation reports.

These officer evaluation reports cover the officers entire time in service. These reports include an officer's university evaluation, platoon leader time, staff positions, as well as company

command evaluations. This enables the board to assess the officer's development and performance over the whole of the officer's career in both staff and command positions.

The third and final element is the FüAk GSOC recommendation form. The officer's division commander completes the recommendation form. The officer's anticipated suitability for general staff officer education and duty is evaluated and the division commander, who is in most cases a *Führungsakademie* educated general staff officer, makes the appropriate endorsement.⁴⁹

With these three elements and the personnel requirements in hand, the central service selection board selects the top 12.5% of the applicants to attend the FüAk GSOC. The next 2.5% in order of merit are selected to attend the *Führungsakademie* International General/Admiral Staff Officers' Course.⁵⁰ The remaining 85% attend the eight week Armed Forces Command Course. This course provides training and education that qualifies these officers to serve as field grade officers in troop leading and non-general staff positions. Officers attend before assuming national and international staff positions.

The selection process for FüAk GCOS is well defined and focused on selecting the most promising officers for continued education in preparation for higher levels of command and staff and increased responsibility within the German Armed Forces and multinational positions.

Educational Methodology

This section focuses on the general educational methodology employed within the *FüAk* GSOC course. Educational methodology as employed in this paper are the components used in

⁴⁹ *Oberstleutnant* i.G. Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001. *Oberst* i.G. Helmut Muhl, German Army, German Army Liaison to the Combined Arms Center, Fort Leavenworth, Kansas, interview by author, 9 April 2002.

⁵⁰ Marschall, *Oberstleutnant* i. G., "Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98 (Hamburg, German: *Führungsakademie der Bundeswehr*, 1998) [PowerPoint Presentation]. The *Führungsakademie* International General/Admiral Staff Officers' Course is a 10 month course. Course attendees include non-NATO international officers. The 2000 course included 52 officers from 37 different countries in addition to 18 German officers. German officers who graduate from this course are not qualified as general staff officers but are rated above officers who have not attended any staff officers' course, similar to American officers who have or have not attended staff college in residence.

the education process. Specifically these include educational taxonomy, academic venues, student class organization, student evaluations and academic rigor. Each of these areas will be examined in order to give an understanding of the collective *Führungsakademie* educational methodology.

The *Führungsakademie* employs a very detailed and structured set of learning goals, sub-goals and objectives.⁵¹ The broad goals are delineated in the *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN* (Catalog of Specific Goals and Content of the Syllabus for the National General/Admiral Staff Officers Course) for each academic course. These goals are further developed, divided, and defined in a series of sub-goals and objectives for each class within the specific course. To aid in defining these sub-goals and objectives, the *Führungsakademie* uses a common taxonomy. This taxonomy is similar to Bloom's Taxonomy.⁵² It defines the levels of learning in the cognitive domain. These levels in turn are used to describe the level of learning desired in each sub-goal or objective area. This standardization provides a common reference across the breadth of the FüAk GSOC curriculum. Additionally, the taxonomy guides the instructors in the preparation and actions within the academic venues.

The academic venues encompass the spectrum of methods used to educate FüAk GSOC students. The *Führungsakademie* demonstrates its belief that a wide variety of educational methods should be employed if students are to gain the most benefit and grasp the most from their educational experience. The academic venues employed include: large group lectures, small group lectures and briefings given by instructors and students, small group seminars, small

⁵¹ Oberstleutnant i.G. Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 November 2001. Major Soehnke Mahrarens, German *Luftwaffe*, FüAk GSOC 2000 student, interview by author 28 Nov 2001.

⁵² Brooks, Vincent K. *Knowledge is the Key: Educating, Training, and Developing Operational Artists for the 21st Century*. (Fort Leavenworth, Kansas: Army Command and General Staff College. School of Advanced Military Studies, 1992.) p 48.

group training exercises, exercise simulations, field trips, and private study.⁵³ These venues are varied and mixed to provide the appropriate learning environment for a given subject. While these venues focus on the academic side, student organization provides for personal, leadership, and character development on the officership side.

To facilitate this personal officer development and compliment the academic learning, students are divided into small groups, the *Hörsaal*. An *Oberstleutnant i.G.* (Lieutenant Colonel , general staff) faculty member, called a tutor, leads the *Hörsaal*. The tutor's duties include direct leadership of students on a daily basis, service specific course instruction, student mentoring, feedback, and counseling as well as student administration. The tutor is also responsible for the student's end of course overall evaluation. The *Hörsaal* comprises the core student structure within the FüAk GSOC. Each *Hörsaal* has between eleven and seventeen student officers. Within the *Hörsaal* all officers will be from one service and will include from one to four North Atlantic Treaty Organization (NATO) / European Union (EU) officers. The current FüAk GSOC class has four army, two air force, and one navy *Hörsaals*.⁵⁴ This totals approximately 109 students: 81 German and 28 international officers.⁵⁵

The *Hörsaal* serves as the basic unit of instruction. This is especially true during service specific academics where each *Hörsaals* receive instruction from its tutors and other same service faculty. Additionally, *Hörsaals* serve as the basis for forming staffs during exercise simulations. The *Hörsaals* also serves as the basic unit for social activities throughout the FüAk GSOC course. During non-service specific courses, *Hörsaals* reorganize to provide an appropriate service

⁵³ *The Führungsakademie der Bundeswehr* Quality Assurance Questionnaire, *Generastabs-/Admiralstabsdienstausbildung Academic Year 2001-2002*. (Hamburg, Germany: *Führungsakademie der Bundeswehr*, Nov 2001). A completed questionnaire provided to the author by *Oberstleutnant i.G.* Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, during interview by author 26 November 2001. The questionnaire further delineates the percentage of time spent in each venue: large group lectures—15%, small group lectures and briefings given by instructors and students—25%, small group seminars—10%, exercise simulations—15%, field trips—5%, private study—13%, and miscellaneous (language, sports, commandant and academic directors time)—17%.

⁵⁴ *Führungsakademie* National General/Admiral Staff Officers Course 2000.

⁵⁵ Marschall, *Oberstleutnant i. G.*, “*Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98* (Hamburg, German: *Führungsakademie der Bundeswehr*, 1998) [PowerPoint Presentation].

mixture. Instruction may then occur with a single *Hörsaal*, several *Hörsaals*, or the entire class. This mixture during academic and non-academic activities enables members of different services to become acquainted with one another. This acquaintance comes during academic classes as well as during joint operations exercises, class trips, and non-academic activities.

The tutor of the *Hörsaal* acts as the focal point for student performance assessment within the *Führungsakademie* Education System. The student assessment system is based on two pillars; the formal assessment and the informal assessment. The tutor largely conducts the formal assessment. The elements of this are: tutor direct observation, academic instructor feedback, and senior faculty member feedback. The largest factor in the student's evaluation is the direct observation and interaction with the tutor. The tutor on nearly a daily basis observes, interacts and assesses individual performance. In classes where the tutor serves as the instructor, the tutor directly observes the student's academic products, both written and oral. The tutor provides formal feedback to the student at mid-course, enabling the student to correct deficiencies.

The second element is the academic instructor feedback. At the end of all courses of more than twenty-two hours duration, academic instructors are required to provide written feedback to the student's tutor.⁵⁶ This information is usually general in nature unless the student performed in an outstanding manner or in a substandard manner. Since none of the course work is directly graded with a standardized set of marks and students take no graded exams in any of their FüAk GSOC courses the instructor's feedback is subjective in nature. Likewise, senior faculty members provide subjective feedback to the tutors for inclusion in the student's academic report.

The tutor makes the student's academic report on a standard Bundeswehr Officer Efficiency Report. The standard officer report is a bi-annual report so the reporting period coincides directly with the FüAk GSOC course duration. Thus, the student's entire time at the *Führungsakademie* is included in this single report. Here the tutor rates the student across a wide variety of

⁵⁶ Major Soehnke Mahrrens, German *Luftwaffe*, FüAk GSOC 2000 student, interview by author 28 Nov 2001. Over the course of the two years, students will receive several dozen academic instructor reports.

categories. The rater is required to provide both numeric and narrative evaluations of the student's academic performance, officership, leadership, staff work, attitude, and future potential.⁵⁷ This evaluation stays as a permanent report within the officer's performance records.

The informal student evaluations come in the form of day-to-day critiques from the tutor and other academic instructors. Generally, these inputs are of sufficient frequency and quality as to inform the student of his performance.⁵⁸ In addition to instructor feedback, students receive feedback from fellow students and they likewise can compare performances on individual academic projects and products. Therefore, while formal feedback is intermittent but very structured, informal feedback serves as the main avenue to ensure students perform to standards.

The performance standards can be defined in two ways. First, is the academic standard within the school—the mark on the wall so to speak. This standard is defined as the application of the decision making process combined with a sound and complete methodology and logic, one that is arrived at by thoughtful use of experience, skillful competence, perfect knowledge of the situation and enough time to derive an effective, efficient, and complete answer. The second performance standard is a comparison against the other students.⁵⁹ This causes the course to be “excruciatingly competitive” as one former student described it.⁶⁰ This competition, first to achieve high standards as compared to the mark on the wall and then secondly against one's peers creates a very rigorous academic environment.

The *Führungsakademie* is perhaps unique in this area of academic rigor. Generally, rigor in the academic environment comes from the use of graded projects, papers, and examinations. These methods enable faculty to require high levels of effort and performance in order to pass the course successfully. The *Führungsakademie* uses no such methods to ensure its high level of

⁵⁷ *Oberstleutnant* i.G. Jörg K.W. Vollmer, interview by author, 28 Aug 2001.

⁵⁸ *Oberstleutnant* i.G. Pedro Renn, German *Luftwaffe*, interview by author 26 Nov 2001. Major Soehnke Mahrarens, German *Luftwaffe*, FüAk GSOC 2000 student, interview by author 28 Nov 2001. This informal feedback depends largely on the individual *horsall* tutor. Students are always free to ask for feedback.

⁵⁹ Lieutenant Colonel (retired) Bill Eggering, US Army, graduate of *Führungsakademie* GSOC 1980-82, interviewed by author 13 Dec 01.

academic rigor. Since no grades are given, the rigor can only be seen to come from two areas; the internal drive of students to perform to high levels and the external factor of the end of course evaluation. Thus, the internal competition to be a top performer provides quite enough rigor to ensure high levels of effort and achievement. The students receive their follow on assignments based on their performance throughout the entire course as reflected in their officer efficiency reports and the recommendations of the tutor and course director.⁶¹ The higher the student ranking, the more chance of continuing responsibility and promotion to high rank within the Bundeswehr exists. However, the effort to be a top performer is counterbalanced by the officer efficiency report. If an officer is seen to be out to gain the top position at the expense of his fellow classmates, his overall evaluation will suffer and he will not be placed in the top order.⁶² Thus, the system has an inherent and continuing rigor but it also has a check and balance to hold the rigor at the required but acceptable level.

This completes the overview of the educational methodology of the *Führungsakademie*. The combined elements of educational taxonomy, academic venues, student class organization, student evaluations and academic rigor serve to ensure that the *Führungsakademie* focuses on its key task of educating general staff officers capable of effective and highly skilled performance at increasingly responsible levels of command and staff. The next section investigates the *Führungsakademie* curriculum as it seeks to educate these officers.

Curriculum

Central to every educational institution and system is its curriculum. The *Führungsakademie* is no exception. The *Führungsakademie* curriculum serves as the foundation for the instruction required to educate officers capable of performing at staff and command levels from brigade

⁶⁰ Ibid.

⁶¹ *Oberst* i.G. Helmut Muhl, German Army, German Army Liaison to the Combined Arms Center, Fort Leavenworth, Kansas, interview by author, 9 April 2002. The course director is the head of all the Hörsaals for a single service for one GSOC class.

through Ministry of Defense and in joint force headquarters at all levels. The two year long curriculum is designed with a building block approach to professional and academic development. The curriculum is also developed and maintained to provide a broad education for the officer. Coursework goes beyond purely military topics and educates officers in such disciplines as economics, political science, foreign language, human physiology, civil-military interaction and its relation to military-civilian crisis management, etc.⁶³ Table 1 depicts the major course classifications within the FüAk GSOC.⁶⁴ In all, the *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Catalog of Specific Goals and Content of the Syllabus for the National General/Admiral Staff Officers Course 2001) mandates a total of nearly 3050 hours of instruction.⁶⁵ These hours encompass instruction in twenty-three major course areas.

The following sections will provide a detailed overview of key curricular components of: service specific classes, joint force classes, general education, exercises, travel, curriculum modification policy, and curricular support.

Service specific classes address planning, leading and conducting military operations at the tactical, operational and strategic levels. Army students begin at the brigade level and progressively learn and perform at the division, corps, and land force component levels during classroom activities and simulation exercises. Combined arms action and the requisite combat support and combat service support planning and execution is stressed at each level. Related leadership, staff, and command subjects are taught. These serve to round out the officers understanding and ability to serve in both staff and command positions. The underlying foundation that is emphasized throughout the service component education is the knowledge,

⁶² Ibid. Thus, LTC Eggering observed no “backstabbing” in order to achieve academic excellence.

⁶³ *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Catalog of Specific Goals and Content of the Syllabus for National General/Admiral Staff Officers Course 2001) (Hamburg, Germany: *Führungsakademie der Bundeswehr*, 20 September 2001). This document defines and enumerates the syllabus goals, objectives, classes, class content, and instruction hours for the FüAk GSOC class entering the *Führungsakademie* in calendar year 2001.

⁶⁴ Ibid. Table is derived from this document. The totals depicted are for the army officers. Slight variations of hours may occur for air force and navy officers.

⁶⁵ Ibid.

understanding and use of military doctrine. This forms the strong, common and uniform reference for all and among all general staff officers.⁶⁶

Führungsakademie Academic Summary

Course Title	Course Hours	Percentage of Total Academic Hours
World and Alliance Interdependencies	20	0.66%
German National Security Policy	12	0.39%
Military History	64	2.10%
Social Sciences	55	1.81%
Leadership and Cohesion of Forces	53	1.74%
Law	28	0.92%
Defense Technology	33	1.09%
Bundeswehr Geo-Information Services	8	0.26%
General Leadership Doctrine	112	3.68%
Economics / Controlling / Cost and Resource Responsibility	4	0.13%
Medical and Health Services of the Bundeswehr	12	0.39%
Military Budgeting and Finance	4	0.13%
Foreign Language Training	100	3.29%
Physical Education	160	5.26%
Personnel Management / Press and Media in Military Operations	42	1.38%
Intelligence / Intelligence Formulation and Reconnaissance	34	1.12%
Planning, Leading and Mission Conduct in the Armed Forces		
Land Force Employment	733	24.10%
Joint Force Employment	333	10.95%
Logistics / Military Transport and Transportation Planning / Infrastructure	85	2.80%
Civil-Military Cooperation (CIMIC)	18	0.59%
Communications / Communications Support and Organization	91	2.99%
National Civil Disaster Management Policy	6	0.20%
Common Class Summary	284	9.34%
Additional Education and Organizational Time	750	24.66%
Total	3041	100.00%

Table 1

The first academic year focuses primarily on single service missions at component command level and below. Approximately 90% of instruction focuses on the tactical level and the remaining 10% at the operational level. Service specific courses fill about 70% of the allotted class hours. General military⁶⁷ and non-military specific classes⁶⁸ fill the remaining 30%.⁶⁹

⁶⁶ *Oberst i.G.* Helmut Muhl, German Army, German Army Liaison to the US Army Combined Arms Center, Command and General Staff Officers Course Academic Year 2001 A502 German Army and European Security Environment, author was a course participant.

⁶⁷ The phrase “general military studies” is used to mean subjects on military topics that fall outside the service specific and joint operations course areas. Examples include: strategic military theory, military history, military law, defense technology, defense budgeting system, etc.

⁶⁸ The phrases “non-military specific,” classes “non-military studies,” “non-military subjects,” etc. are used to categorize all subjects, courses, and classes that deal with topics where non-military policy, doctrine, theory, actions, or influence are preponderant. Examples include: geopolitics, international security strategy, economics, social science, information technology, human physiology and fitness, etc.

During the second year, the focus shifts to operational and strategic level studies with no appreciable time spent at the tactical level. Operational level topics consume approximately 70% of the class time and strategic subject areas the remaining 30%.⁷⁰ However, during the second year single service topics fill only about 20% of the syllabus hours. The remaining 80% of class hours are spent on joint military topics, general military studies, and non-military specific subjects.⁷¹ Thus, students are well grounded in their own service's doctrine, procedures, and operations at the tactical, operational, and strategic levels.

Joint operations instruction is a relatively new major course area at the *Führungsakademie*.⁷² The Joint Operations and Training Department is a natural outgrowth of the increased awareness and demand for joint and combined doctrine, training, education, exercises, and operations.⁷³ Graduates of the FüAk GSOC are eligible to be assigned and expected to be able to skillfully fill various joint and multi-national headquarters positions upon graduation.⁷⁴ Thus, the education of officers in joint and combined operations is seen as essential.⁷⁵

The Joint Operations and Training Department establishes goals that guide student education and focus on preparing officers for participation in joint operations. The following major goals give students: an understanding of the interrelationships of policy, strategy, operational art, and tactics; an understanding of the relationships between peacetime planning, crisis management, and wartime operations; a knowledge of the NATO, WEU/EU, UN-documents that direct the

⁶⁹ *Hauptmann* (Captain) Jesko Peldszus, German Army, FüAk GSOC 2000 student, interview by author 29 Nov 2001.

⁷⁰ *Ibid.*

⁷¹ *Ibid.*, and Major Soehnke Mahrarens, German *Luftwaffe*, FüAk GSOC 2000 student, interview by author 28 Nov 2001.

⁷² *Oberst i.G.* Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001. The *Führungsakademie* Joint Operations and Training Department was established in 1998, however the first GSOC joint operations exercise was conducted in 1991.

⁷³ *Ibid.*, Germany stood up its first Joint Operational Headquarters since World War II in 2001. The *EinsFüKdoBw Potsdam* (JHQ Potsdam) became initially operational capable in December 2001.

⁷⁴ *Ibid.*, current positions available to new *Führungsakademie* graduates are in German Joint Force Headquarters (HQ) Potsdam, Stabilization Force (SFOR) HQ, Kosovo Force (KFOR), North Atlantic Treaty Organization HQs and German/multi-national brigade, division and corps HQs.

⁷⁵ *Ibid.*

planning for and employment of instruments of power; an appreciation for the cooperation required between services and Allies in planning and conducting Joint and Combined Operations; and training in the command and control process.”⁷⁶

The majority of joint operations subjects are taught during the second year. Joint operations courses cover a wide variety of subjects. While a majority of focus is placed on operational level instruction (approx 80%), some instruction is devoted to strategic level subjects (approx 20%). Subjects included in joint operations range the spectrum of conflict. Low-end conflict instruction deals with non-combatant evacuation operations. Peace support and peacekeeping operations are studied in detail. The study of high-end conflict includes North Atlantic Treaty Organization (NATO) Article V (Defense of NATO) scenarios focused on theater level combat operations.⁷⁷

The syllabus defines a mix of academic venues for the instruction of joint operations. Classroom instruction consisting of faculty lectures, faculty led seminars and student and faculty briefings prepares the students for participation in real world operations. Additionally, classroom instruction prepares students for participation in the six joint exercises. Approximately 60% of the joint instruction is conducted through these six exercise simulations. Trips to various joint operations headquarters⁷⁸ deepen and round out the students understanding of joint force staff and command requirements.

Thus, joint operations education in combination with service specific instruction provides the required military foundation of the staff officers’ education. However, the *Führungsakademie* education system maintains the idea that an officer must be more broadly educated than these operationally oriented military specific subjects alone provide. With this in mind, the *Führungsakademie* continues beyond the operationally oriented military foundation.

⁷⁶ *Zentrum Führung Gemeinsame Operationen, "Präsentation Gem Ops"* (Joint Operations Presentation), (Hamburg, Germany: *Führungsakademie der Bundeswehr*, 2 May 2001). [PowerPoint Presentation]. Goals derived from PowerPoint Presentation. WEU/EU is Western European Union/European Union.

⁷⁷ *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Hamburg, Germany: *Führungsakademie der Bundeswehr*, 20 September 2001).

⁷⁸ See Appendix 3 for a list of FüAk GSOC trips.

The general education that the student receives at the *Führungsakademie* is a direct carry over from previous German General Staff officer educational practices. Current general education at the *Führungsakademie* encompasses a wide variety of subjects. These subjects can be divided into two categories: general military studies and non-military studies. General military topics include: national security policy, strategic military theory, military history, military law, defense technology, geoinformation services⁷⁹, military-media communications, defense budgeting system, military medical methodology, civil-military cooperation, military leadership, and military assistance during civil disasters. General military topics aid the officer in two specific ways. First, they give context to and broaden the officer's understanding of the interactions and requirements of military operations at all levels. Secondly, they help prepare the officer for duties at the operational and strategic level by providing him with a broad base of knowledge. This enables officers to more competently serve at all staff levels upon completion of the FüAk GSOC and provides a significant foundation for additional knowledge and skill required at more senior command and staff levels.⁸⁰

Non-military courses endeavor to further broaden the officer's education. These courses aid in helping officers understand the military's relationship to political and social structures. Additionally, officers learn what affects these political and social structures and develops an understanding of the integral economic, geographic, human factors which influence military, government and social structures. Non-military subjects include: world politics, geopolitics, national/international geography, political theory, economics, international law, human rights, communications theory, leadership theory, foreign language training, and human physiology.⁸¹

⁷⁹ *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Hamburg, Germany: *Führungsakademie der Bundeswehr*, 20 September 2001) 15. Geoinformation includes analog and digital cartography, and navigational/geo-positioning technology.

⁸⁰ *Oberst i.G.* Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001.

⁸¹ *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Hamburg, Germany: *Führungsakademie der Bundeswehr*, 20 September 2001).

An analysis of the syllabus indicates the following percentages of course hours for the three major academic divisions: service specific/joint operations topics—55%; general military topics—25%; non-military topics—15%.⁸² Classroom instruction includes a variety of venues to include professorial lectures, instructor briefings, student briefings, practical exercises, discussions, and research presentations. Guest lecturers from outside the Führungsakademie faculty teach approximately five percent of the curriculum. These lectures bring significant subject matter expertise to the GSOC.⁸³ While students spend a large percentage of time in the classroom, they spend a significant portion participating in simulation exercises.

Simulation exercises are a key element in the *Führungsakademie* education system. Exercises combine the separate elements previously studied in the classroom enabling the officer to gain both experience and a deeper understanding of the subject. Service specific exercises are conducted during the first academic year. Exercises begin at brigade level and move by echelon to the component command level thereby covering tactical and lower operational levels of conflict. Joint operations exercises are a primary emphasis during the student's second year. Six joint exercises cover the spectrum of conflict between non-combatant evacuation operations and high intensity theater level combat operations. These simulations facilitate student education and training in multi-echelon staff and command functions. These exercise focus on operational and lower strategic levels. In addition to exercises, students take trips to broaden their understanding.

Each student participates in a significant number of trips spaced throughout the two years of academics. (See Appendix 3) The goals of the trips are to develop the students' knowledge of their own service, their sister services, provide an increased understanding of the interdependencies between the military, industry, and political structures, further international

⁸² Derived from *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Hamburg, Germany: Führungsakademie der Bundeswehr, 20 September 2001). This analysis is meant to give a general idea of course percentages and is not intended to be a definitive analysis of course categories.

⁸³ Marschall, Oberstleutnant i. G., "Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98 (Hamburg, German: Führungsakademie der Bundeswehr, 1998) [PowerPoint Presentation].

relationships and to gain a fuller appreciation of the structure and operations of NATO nations.⁸⁴ Additionally, these trips help round out the curriculum, serving to give students a sense of reality and give a balance to their classroom and exercise experiences.

While the curriculum serves as the foundation of instruction and the key tool in guiding officer education, it must remain flexible and able to incorporate change allowing for improvement and modification. Without this change capacity, the curriculum would rapidly stagnate, ossification would occur, and officers would fail to receive the education required to enable them to meet the ever-evolving military and political situation in which they operate. The *Führungsakademie* seeks to avoid curriculum stagnation by a number of different methods and programs.

The Ministry of Defense sets forth general educational and curriculum guidance through its periodic training directives.⁸⁵ The three service departments and the Joint Operations Department at the *Führungsakademie* additionally receive directives from the service deputy chief of staff and Joint Staff respectively on service and joint operations specific educational goals and requirements.⁸⁶ The *Führungsakademie*'s seven departments⁸⁷ act upon this guidance to develop, modify, or change specific educational goals, sub-goals, objectives, and course hour distribution.⁸⁸ The *Führungsakademie* G-3 Training and Instruction Planning serves as the overall coordinating agency for curriculum development, modification and change incorporation.

⁸⁴ Marschall, Oberstleutnant i. G., "Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98 (Hamburg, German: *Führungsakademie* der Bundeswehr, 1998) [PowerPoint Presentation]

⁸⁵ Oberstleutnant i.G. Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 November 2001.

⁸⁶ Padberg, Michael, Oberst i.G., Director, Luftwaffe Department, *Führungsakademie der Bundeswehr*. Interview by author, 27 November 2001. Oberst i.G. Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001.

⁸⁷ Marschall, Oberstleutnant i. G., "Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98 (Hamburg, German: *Führungsakademie* der Bundeswehr, 1998) [PowerPoint Presentation]

The seven departments are: Army, Air Force, Navy, Security Policy and Strategy, Social Sciences, Leadership and Management, and Joint Operations and Training.

⁸⁸ Oberstleutnant i.G. Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001. Decision making power rests with the department directors through the Director of Faculty and the *Führungsakademie* Commandant. If an agreement cannot be reached within *Führungsakademie*, the Ministry of Defense arbitrates and makes the final decision.

In addition to outside curriculum modification procedures, the *Führungsakademie* has several internal programs for determining if courses are in need of modification, updating, or deletion.

The first mechanism is a review before the beginning of each course as to the validity of the proposed syllabus. While not conducted automatically prior to the commencement of each course, new classes and major sections routinely receive this review by instructors within the responsible department.⁸⁹ The second mechanism for curriculum modification is the *Lehrgangsprojekt* (Course Project Organization). Each course has a Course Project Organization (CPO) that is responsible for the planning of new courses, reviewing current course progression as well as receiving, planning and implementing course modifications.⁹⁰ The CPO is headed by either a department director or course director and consists of the tutors, instructors, student representative, and a controlling officer.⁹¹ The CPO meets as required for new course development. For existing courses, it meets every four to six weeks for long duration courses and at the conclusion of short duration (less than a month) courses. The final curriculum modification mechanism is the survey program.

The survey program has both a formal and informal portion. Two survey programs exist within the formal portion. The first is the survey that students provide after each course and exercise. One student consolidates fellow student feedback on the course or exercise and prepares a report for submission to the responsible academic department. The department looks for significant trends and addresses these as required.⁹² In the second formal program, the *Führungsakademie* sends surveys to FüAk GSOC graduates approximately one and one half

⁸⁹ *Oberstleutnant i.G.* Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001.

⁹⁰ *Oberstleutnant i.G.* Martin Lütje, "Course Project Organization" (Hamburg, German: *Führungsakademie* der Bundeswehr, 2001) [PowerPoint Presentation]

⁹¹ *Oberstleutnant i.G.* Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001. The tutor is the *Hörsaal* (seminar) leader and the controlling officer is from the G-3 Training and Instruction Planning office. The *Führungsakademie* Director of Faculty is the final arbiter when consensus within the CPO cannot be reached.

⁹² *Hauptmann* (Captain) Jesko Peldszus, German Army, FüAk GSOC 2000 student, interview by author 29 Nov 2001. Major Oliver Dörre, German *Luftwaffe*, FüAk GSOC 2001 student, interview by author 28 November 2001.

years after graduation. This survey strives to find how well the former student was prepared for his follow-on assignment.⁹³ The surveys are compiled and analyzed to see if trends exist that might require curriculum modification. The other mechanism is the informal feedback system.

Commanders and Chiefs of Staff who are assigned new graduates are encouraged to provide informal feed back to the *Führungsakademie* on how well their officer was prepared by FüAk GSOC.⁹⁴ Additionally, the *Führungsakademie* invites senior service commanders to observe and interact with students. These senior officers evaluate student performance and make informal recommendations for changes based on current operational requirements.⁹⁵

Thus, the *Führungsakademie* has in place a system to take inputs from the Ministry of Defense, services and joint forces staff and make the required curriculum modifications. Through the use of the CPO, the *Führungsakademie* is able to make modifications that are driven by either external or internal requirements. Additionally, both formal and informal feedback programs from students and commanders in the field enhance the *Führungsakademie* internal process. Once the curriculum is in place it must be supported in a manner that enables the intended education to occur.

Curricular support in this context means the educational infrastructure within the *Führungsakademie* that directly supports student education. A brief description of these will be given in this section beginning with the physical facilities. Currently,⁹⁶ the FüAk GSOC is conducted in Hamburg, Germany. The academic buildings for the most part were built in the 1950s and 1960s. Renovation projects to improve and upgrade a portion of these facilities are currently ongoing. The *Führungsakademie* has a state of the art exercise simulation facility. The facility enables the conduct of fully computerized exercise simulations from battalion to theater

⁹³ *Oberstleutnant i.G.* Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001.

⁹⁴ Ibid. Padberg, Michael, *Oberst i.G.*, Director, Luftwaffe Department, *Führungsakademie der Bundeswehr*. Interview by author, 27 November 2001.

⁹⁵ Padberg, Michael, *Oberst i.G.*, Director, Luftwaffe Department, *Führungsakademie der Bundeswehr*. Interview by author, 27 November 2001.

joint operations size. The simulation infrastructure enables the integration and video teleconferencing of up to eight player headquarters and twelve control or response cells. Five servers, more than 200 personal computers, printers, plotters, digitizing tables and multimedia projectors, supported by optical fiber information technology and audiovisual network, and programmable communications systems assist the exercise players. The facility also houses a 230 seat plenum.⁹⁷ Additional physical infrastructure includes the *Führungsakademie* library is located on the main *kaserne*. It supports student education with its large number of bound volumes and 401 different journal and magazine subscriptions. The library has reproduction machines enabling faculty and students to copy required materials for free.

Technology support comes in the form of personal laptops issued to each student.⁹⁸ However, access to the Internet is limited to two computers in the library and several of the instructors and senior faculty. Thus, students are required to do most of their Internet work at home. The *Führungsakademie* is currently installing its first local area network (LAN) on the main *kaserne*.⁹⁹ Students use electronic media, most often Microsoft PowerPoint and Microsoft Word, for a large percentage of their course work and receive some courseware in the form of compact disc (CD-ROM).¹⁰⁰ Military manuals aid in student education but the *Führungsakademie* uses no commercially produced academic textbooks.¹⁰¹ In place of textbooks, the school produces its own “readers” for student instruction.¹⁰² Students retain all courseware

⁹⁶ As of March 2002.

⁹⁷ *Oberstleutnant i.G.* Joerg K.W. Vollmer, “Exercise and Training Centre” (Hamburg, German: *Führungsakademie* der Bundeswehr, 2001) [PowerPoint Presentation]

⁹⁸ *Hauptmann* (Captain) Jesko Peldszus, German Army, FüAk GSOC 2000 student, interview by author 29 Nov 2001. The computer issued to FüAk GSOC 2000 class was a Pentium 2, 660 Megahertz.

⁹⁹ Padberg, Michael, *Oberst i.G.*, Director, Luftwaffe Department, *Führungsakademie der Bundeswehr*. Interview by author, 27 November 2001.

¹⁰⁰ Major Soehnke Mahrarens, German *Luftwaffe*, FüAk GSOC 2000 student, interview by author 28 Nov 2001. Instructors often provide PowerPoint briefings to their students via CD-ROM. Additional course materials are copied onto and distributed by CD-ROM.

¹⁰¹ *Oberstleutnant i.G.* Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001. Major Oliver Dörre, German *Luftwaffe*, FüAk GSOC 2001 student, interview by author 28 November 2001.

¹⁰² *Ibid.*, Student “readers” contain material written by faculty as well as reproduced information from journals and other academic sources.

except for official publications, field manuals, and laptop computers. Thus, within the curriculum the specific areas of the service specific classes, joint force classes, general education, exercises, travel, curriculum modification policy, and curricular support have been examined. The curriculum and its subcomponents are critical to the proper functioning of the *Führungsakademie* Education System in regard to the FüAk GSOC course.

Faculty

While the curriculum of an educational institution is key, it follows that its faculty is critical. Without an excellent and skilled faculty, the *Führungsakademie's* high academic goals and objectives would not be obtainable. With this understanding, the *Führungsakademie* strives to ensure that its faculty is capable of achieving the goals that are all important to the education of future general staff officers. The four significant areas that contribute to faculty quality; faculty selection, faculty training, faculty evaluation, and post faculty career progression will be investigated.

The selection of high quality faculty has always been a significant factor in the success of the *Führungsakademie* in its task of educating high quality staff officers. The *Führungsakademie* shares this attribute with the *Kriegsakademie* of old. In continuing the tradition of general staff officers educating general staff officers, the *Führungsakademie* strives to fill most of its academic positions with graduates of the FüAk GSOC. However, even within this goal of returning general staff officers to teach, the present commandant has set forth policies governing faculty recruitment.¹⁰³ The established criteria strives to place only the best on the *Führungsakademie* faculty and staff.¹⁰⁴ The *Führungsakademie* seeks officers who not only possess general staff

¹⁰³ *Generalmajor* (Major General) Hans Christian Beck, German Army.

¹⁰⁴ *Oberstleutnant* i.G. Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001. As an example the current requirements to be a tutor are: former successful battalion command, significant experience within the operations field (G-3), Ministry of Defense staff time, and NATO experience either on a NATO staff or command of a German unit in a NATO operation.

officer training but those officers who through experience, education and application have shown them to be among the very best within the Bundeswehr.

However, the *Führungsakademie* recognizes both its inability to fill all of the faculty and staff positions with general staff officers and the requirement for faculty with specific areas of expertise. With this in mind, the overriding considerations governing faculty requirements are individual qualifications and knowledge of a given subject area.¹⁰⁵ Thus, the *Führungsakademie* has on faculty not only non-general staff officers but civilians who possess the required expertise to fulfill the educational goals. The non-military faculty members are to be found teaching non-military subjects such as economics, political science, etc. Additionally, the *Führungsakademie* make use of guest lecturers to provide the expertise to teach topics where no resident faculty is capable. Key to this guest lecturer program is the significantly positive reputation that the *Führungsakademie* has built with civil educational institutions as well as governmental agencies and civilian industry.¹⁰⁶ This enables the *Führungsakademie* to routinely draw respected experts on a wide variety of subjects to address the FüAk GSOC students. The combination of quality military and civilian faculty and the vigorous guest lecturer program enable the *Führungsakademie* to strive for high academic goals and objectives. However, recruitment is only a part of the faculty program.

After officers have been recruited onto the *Führungsakademie* faculty, their teaching ability is developed through the mandatory attendance of a six-week didactics course. During this course, new instructors receive instruction in general education principles and methodology as well as their new curriculum requirements.¹⁰⁷ Upon the completion of this course, the new instructor begins teaching under supervised status. The period of normal supervision is three

¹⁰⁵ *Oberst i.G.* Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001.

¹⁰⁶ *Oberst i.G.* Helmut Muhl, German Army, German Army Liaison to the Combined Arms Center, Fort Leavenworth, Kansas, interview by author, 26 Nov 2001.

months and enables the new teacher to be informally evaluated and receive guidance from a more experienced faculty member.¹⁰⁸ The normal tour of duty for a faculty member as defined by the *Führungsakademie* Commandant is two to three years for non-specialist officers. This rotation policy focuses on keeping the officer and his instruction current.

With this in mind, the official policy of the *Führungsakademie* is for faculty to regularly attend continuation training. However, the process is an informal one and largely is left to the officer's own initiative and budget constraints. The general trend is that officers who teach specialized or rapidly changing subjects attend more continuation training than officers who instruct in broad academic areas do.¹⁰⁹ Likewise, the policy to shorten desired tour lengths helps stimulates faculty rotation and the influx of officers with current operational experience. In addition to initial and continuation training, officer evaluations help motivate officers to remain current within their fields as well as provide stimulating and skilled instruction.

The military faculty uses the standard Bundeswehr officer efficiency report. This biannual report takes into account the entire performance of the officer in his official duties, officership, leadership, and evaluates his potential for higher responsibility in staff and command. Input for this evaluation comes from direct and indirect observation from senior officers, assessment of the quality of products produced, and evaluations and feedback of course instruction by students. The rater weighs all of these and other factors and uses them to provide a comprehensive assessment of the officer. This assessment along with previous qualifications, experience, and demonstrated capability factor into the officer's post-*Führungsakademie* assignment.

For the most part, both the officers themselves and the military in general view most faculty and staff positions at the *Führungsakademie* as a "good" assignment. Officers filling a large

¹⁰⁷ *Oberstleutnant* i.G. Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001. The *Führungsakademie* Leadership and Management Department teaches this course. Members of the Ministry of Defense, fire departments, and other civilian professionals also attend the course.

¹⁰⁸ *Oberst* i.G. Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001.

¹⁰⁹ *Oberstleutnant* i.G. Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001.

portion of the *Führungsakademie* positions are still considered upwardly mobile within the military and thus go on to better and more responsible positions after their *Führungsakademie* duty.¹¹⁰ This factor significantly aids in recruiting high quality officers to fill *Führungsakademie* staff and faculty billets. Additionally, it has a positive influence on the quality, motivation, and effort exerted by the personnel at the *Führungsakademie*.

The significant areas that contribute to faculty quality; faculty selection, faculty training, faculty evaluation, and post faculty career progression enable the *Führungsakademie* to set high standards. These standards apply not only to the students but also to the faculty and staff as well. Thus, the incentives for improvement of the system are aided through these personnel policies and actions.

Post Education Concepts

The post FüAk GSOC concepts are the final major portion of the overall *Führungsakademie* Education System. These concepts include the ranking of FüAk GSOC students, the placement of graduates as a result of their achievement during the FüAk GSOC, graduate skill and performance capability expectations, additional formal military education, and self-development capability. To a certain degree, these aspects directly and indirectly influence the FüAk GSOC students, GSOC curriculum, and student assessment. The first significant post FüAk GSOC influence is the placement of course graduates.

The placement of course graduates finds its roots in the Prussian General Staff system. The outstanding graduates from the *Kriegsakademie* were retained as members of the Great General

¹¹⁰ *Oberst i.G.* Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001. *Oberstleutnant i.G.* Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001. As indicated by *Oberstleutnant* Renn, tutors and officers directly involved in this chain of command are considered upwardly mobile. Many other positions that have significant responsibility and authority within the *Führungsakademie* are similarly filled by officers who can look forward to promotion both in responsibility and in rank in post-*Führungsakademie* positions.

Staff.¹¹¹ A similar action takes place in the current Bundeswehr General Staff System. Currently, the top achievers are placed in more responsible and more demanding positions within the Bundeswehr. To facilitate this placement of graduates, tutors and course directors develop an unofficial and general order of merit list. This list places officers in the upper, middle, or lower third of his class. Additionally, officers in the approximate top ten percent are also delineated. This list serves as a tool for the tutor to council the student officer and make assignment recommendations. Officers are matched to assignments with reference to this informal list and other specific job criterion, officer experience, personality, etc. Certainly for those in the upper group this often results in receiving “better” follow on positions. Thus, academic performance, officership, and potential are linked together through the efficiency report system and the informal ranking and are used to best match officers with their follow on positions.¹¹² With this process goes a spoken and unspoken performance expectation.

These performance expectations are two-fold. First, the expectation of the graduate is that he will be well prepared to successfully and capably perform the duties in his next staff position.¹¹³ Second is the expectation that officers have the educational foundation to continue to learn, develop professionally, and perform well in ever increasing positions of responsibility at the tactical, operational, strategic, and military-political strategic levels. This is evidenced by the fact that the FüAk GSOC is the last major formal education that a general staff officers receive within the Bundeswehr. There are specific courses of short duration taught at the *Führungsakademie* that provide a minimum of continuing education for senior field grade and general officers.

¹¹¹ Clemente, Steven E. *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914*. (New York: Greenwood Press, 1992), 192. While the top rated were retained for general staff duty the others were placed in field staffs with army divisions and corps.

¹¹² *Oberstleutnant i.G.* Joerg K.W. Vollmer, interview by author, 28 Aug 2001. *Oberst i.G.* Helmut Muhl, German Army, German Army Liaison to the Combined Arms Center, Fort Leavenworth, Kansas, interview by author, 9 April 2002.

¹¹³ *Oberst i.G.* Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001.

These however are not equivalent to the FüAk GSOC in length, depth or duration.¹¹⁴ Thus, the education provided by the FüAk GSOC is calculated to give the general staff officer not only the tools needed for his next assignment or two but the tools to continue to learn and develop on his own as he continues his career in both command and staff billets.¹¹⁵ These expectations serve as powerful forces both within the *Führungsakademie* and after completion of the FüAk GSOC.

Summary

As has been described, the educational system of the *Führungsakademie* is based on a small, select student class taught by a skilled and experienced core of officer and professional instructors. The curriculum taught by these instructors encompasses a wide variety of academic subjects taught in a variety of venues. The demands placed on students in the educational environment provides sufficient rigor to produce officers with the intellectual and leadership capabilities who are expected to be capable of performing in an outstanding manner in their future command and staff positions within the German Armed Forces.

Five key elements, student selection, curriculum, educational methodology, faculty, and post education concepts were described to provide an understanding of the *Führungsakademie* Education System. The *Führungsakademie* Education System will now be analyzed by criteria explained in the following chapter and applied in the subsequent chapter.

¹¹⁴ Marschall, Oberstleutnant i. G., “*Englisches Printbriefing, Kernbriefing der Akademie mit Stand April 98* (Hamburg, German: *Führungsakademie der Bundeswehr*, 1998) [PowerPoint Presentation].

¹¹⁵ Officers when they graduate from the FüAk GSOC still have between 23 and 27 years of service remaining prior to retirement.

CHAPTER FOUR

EDUCATION SYSTEM EVALUATION METHODOLOGY

To transform knowledge about the German *Führungsakademie* education system as presented in Chapter Three into a useful understanding as to whether the *Führungsakademie* education system meets the needs of current and future military education requirements, a system of evaluation system is required. Of particular importance and utility is the evaluation of the *Führungsakademie* system against American professional military education requirements. With this in mind, the goal of the evaluation system is two fold. First, it is to appraise in a broad manner the suitability of the *Führungsakademie* education to meet the needs and requirements as established by competent American military authorities, namely the Chairman, Joint Chiefs of Staff. Second, it is to provide a springboard from which a more detailed investigation of the specific strengths of the *Führungsakademie* system and the identification of potential attributes, programs, and practices which may be of significant utility and thus merit incorporation into American professional military education programs.

This chapter begins with a brief description of the current Chairman, Joint Chiefs of Staff (CJCS) Program for Accreditation of Joint Education (PAJE) evaluation standards. Next, the modified criteria developed from the CJCS PAJE standards are explained. The chapter concludes with a description of the qualitative grading system used in the *Führungsakademie* National General/Admiral Staff Officer Course (GSOC) evaluation.

The assessment criteria developed are based on the current United States CJCS educational standards for US joint professional military education. As directed by the Chairman, the Director for Operational Plans and Interoperability (J7) within the Joint Staff is responsible for military education and has the task of ensuring integration of Joint Professional Military Education

(JPME) with joint training, exercises, and doctrine.¹¹⁶ The Deputy Director J7 is designated, Deputy Director, Joint Staff, for Military Education. His primary responsibilities are assisting with policy formulation for coordinating the military education of all of the armed services and the oversight of PAJE administration.¹¹⁷ Within the PAJE program are criteria for the evaluation of joint education. The PAJE standards serve as the basis for the modified criteria developed for assessment of the *Führungsakademie* education system.

The CJCS PAJE criteria were selected as a starting point for several reasons. First, the CJCS's authority supercedes the individual services' authority in the establishment of doctrine and standards; thus, the CJCS standards should serve as a foundational and common basis for all individual service educational standards. Second, the German *Führungsakademie* is a joint professional military education school. The CJCS standards are the authoritative joint educational standards for assessment of all US joint military education. Therefore, these standards are more suited to *Führungsakademie* assessment than a single service's officer educational standards. Third, in a practical manner the CJCS standards largely incorporate the requisite criteria for an objective and realistic assessment of officer professional military education at the appropriate level. See Appendix 1 for the six PAJE standards.

The six areas the CJCS standards focus on are: development of joint awareness, educational methods, student achievement assessment, support of the joint community needs, faculty selection and faculty development. The only significant areas where the CJCS PAJE criteria fall short in enabling a comprehensive assessment of the *Führungsakademie* system is in ability to assess whether a program meets single service requirements and the breadth of education enabling graduates to perform in increasingly complex and demanding positions in the future.

¹¹⁶ Chairman, Joint Chief of Staff, Joint PME Responsibilities website located at <http://www.dtic.mil/mil-ed/omep/purpose.html>, accessed 31 Dec 01.

¹¹⁷ Ibid. For a complete list of the Joint Staff, J7 Directorate PME education responsibilities see Appendix 3.

The six PAJE standards were modified, rearranged to facilitate more logical application, and renamed “criteria” in order to enable a more comprehensive, focused, and specific assessment of the *Führungsakademie* education system.

In order to facilitate application, each criteria will be divided into specific topic areas in the form of questions. These specific questions will then be used to qualitatively analyze the *Führungsakademie* system.

Criteria 1 focuses on the instructional methodology and educational taxonomy of the system. It assesses not only the dynamics of the instruction but also the level of understanding the instruction strives. Criteria 1 is as follows:

Criteria 1. Employ predominately active and highly effective instructional methods for the subject matter and desired level of learning. Active involvement of students in the learning process promotes retention, deeper comprehension, and development of professional attitudes.

The specific questions which support Criteria 1 are: 1) Does the *Führungsakademie* employ active instructional methods for the subject matter? 2) Does the *Führungsakademie* employ an educational taxonomy that enables it to achieve the desired level of learning? 3) Do the educational methods involve the student, enabling information retention, comprehension and further the development of professional attitudes?

Criteria 2 centers on the student assessment process. Does the educational system have in place a comprehensive means of evaluating the student’s performance and a reward system for different levels of achievement? Criteria 2 is as follows:

Criteria 2. Assess student achievement. The institution should aggressively assess its students’ performance and determine the degree to which instructional methods achieve professional military educational goals and objectives for both individual service and joint forces. Educational goals and objectives should be rigorous and measurable by defined institutional standards. The evaluation program should differentiate among the levels of student achievement and reward students who achieve higher standards.

The specific questions which support Criteria 2 are: 1) Does the institution aggressively assess student performance in order to determine to what level the student has achieved the

established educational goals? 2) Are the educational goals and objectives rigorous so as to ensure an appropriate level of learning? 3) Does the institution have in place a system that measure and reward students in accordance with their achievement?

Criteria 3 focuses on the joint aspect of the professional military education provided at the institution. Within the joint education, the criteria seek to find if the program develops a proper joint perspective in the student at all of the levels of war. Within the educational environment, the criteria asks if a proper service ratio of instructors and students is appropriate for the desired learning objective.

Criteria 3. Develop joint awareness, perspective, and attitudes. The stated learning areas and objectives for JPME are to prepare graduates to operate at appropriate levels of war in a joint environment and to generate quality tactical, operational, and strategic thought from a joint perspective. Institutions' mission, goals, and objectives should reflect joint educational requirements to ensure that students are exposed to appropriate joint attitudes while pursuing the joint education curriculum. Student and faculty ratios and student seminar mix should meet specified requirements to ensure a quality joint learning experience.

Specific Criteria 3 questions are: 1) Does the joint curriculum sufficiently prepare officers to capably serve in joint staff and command billets with an appropriate level of joint understanding? 2) Does the curriculum provide enough joint education to ensure that officers have the appropriate joint attitudes to facilitate an acceptable level of service cooperation within a joint operations environment? 3) Does the institution possess the appropriate faculty/student service ratios to ensure a quality joint education?

Criteria 4 investigates the institutions ability to meet individual service and joint force requirements. The criteria asks if the institution conducts research to find out if it is meeting the service and joint force needs and if it uses these findings to modify the curriculum. Lastly, the criteria is concerned with the institution's ability to appropriately modify its curriculum to reflect changing realities.

Criteria 4. Support the needs of the individual services and joint communities. Institution should conduct research to determine curriculum and instructional effectiveness of the program. Results of these analyses should be used to refine or

develop curricula relevant to the requirements of the individual services and joint communities. Curriculum evolution should reflect changing realities.

Specific Criteria 4 questions are: 1) Does the institution conduct the appropriate level of research in order to determine curriculum and instructional effectiveness? 2) Does the institution actively analyze this research in order to improve its curriculum in concert with individual service and joint community needs? 3) Is there an established system that is appropriately responsive and enables curriculum modification once new requirements have been identified by individual services and/or the joint community?

Criteria 5 addresses the policy and procedures for the selection, assignment, and performance assessment of the institution's faculty. Included in the faculty selection is the ability of the faculty to serve as role models for the students. Next, the criteria addresses the requirement of the faculty to participate in a faculty development program as well as conduct research and publication. Finally, the criteria identifies the need for faculty performance assessments against established standards.

Criteria 5. Conduct a quality faculty recruitment, selection, assignment, retention, development, and performance assessment program. Faculty should have the academic credentials, teaching skills, and command and staff experience in individual service and joint tactical, operational, and strategic matters needed to teach the applicable service and joint education. Military instructors should be of appropriate rank and serve as role models for students. The institution should have a faculty development program dedicated to improving instructional skills, increasing subject matter mastery, encourage thinking, and maintain currency in subject areas. Policy and manning should provide for research and publication by faculty members. Time and funds to attend conferences should be provided to promote academic vigor and allow faculty to acquire state-of-the-art currency in areas of expertise. Institutions should hold faculty accountable for clearly defined and measurable faculty and staff performance criteria and standards.

Specific Criteria 5 questions are: 1) Does the faculty have the appropriate academic credentials, teaching skills, and command and staff experience in individual service and joint tactical, operational, and strategic matters needed to teach the applicable service and joint education? 2) Are the faculty of sufficient character, experience, and rank to successfully serve as role models to the students? 3) Does the institution have a faculty development program that

enhances faculty's instructional skills, subject matter mastery and currency? 4) Does the institution have a faculty assessment system to ensure appropriate academic performance?

While Criteria 1 through 5 are objectively focused, Criteria 6 is subjectively focused. The criteria centers on the potential of the future graduate to understand and appropriately act at various levels of conflict. Likewise, it also asks if the officer is appropriately educated so as to shoulder increasingly more complex and responsible positions within the command and staff structure of the military.

Criteria 6 The institution's education should be broad based enough to provide the graduate with an understanding and appreciation of factors at the operational and strategic levels that are likely to influence future military operations. The graduate's education should enable him to understand, appropriately react to, and successfully deal with future change at the tactical, operational, and strategic levels of war. The graduate should be educated so as to make significant and positive contribution to military operations at increasing levels of staff and command responsibilities in the future.

Specific Criteria 6 questions are: 1) Does the student receive an education that is broad enough yet detailed to facilitate an appropriate level of understanding of factors that will and potentially will effect future military operations? 2) Does the student's education appropriately equip him to deal with future change at the tactical, operational, and strategic level of war? 3) Does the education give the student the required tools and develop the appropriate attitudes to enable the student to continue to make significant and positive contributions to military operations at increasing levels of responsibility?

Each of the above questions will be evaluated with the following rated answers: fully meets, meets, partially meets, fails to meet, and undetermined/unknown. The definitions of the rated answers are: Fully meets = the *Führungsakademie* Educational System clearly satisfies the criteria by demonstrating through both intent and action a high degree of sustained quality achievement in the assessed area. Meets = the *Führungsakademie* Education System satisfies the criteria by demonstrating through both intent and action an acceptable degree of sustained achievement in the assessed area. Partially meets = the *Führungsakademie* Educational System satisfies the criteria only partially by demonstrating either in intent or action an acceptable degree

of achievement in the assessed area. Fails to meet = the *Führungsakademie* Educational System does not satisfy the criteria through a failure to demonstrate either in intent or action a minimum acceptable level of achievement in the assessed area. Undetermined/Unknown = not enough data was collected to make a determination in the assessed area.

The methodology will be to present the question, provide the rated answer, and provide a justification for the rated answer. An overall rated answer will be determined for each of the six criteria with appropriate justification. Following the six criteria evaluations, a short analysis will be made of the entire *Führungsakademie* Educational System.

CHAPTER FIVE

FÜHRUNGSAKADEMIE EDUCATION SYSTEM EVALUATION

In this chapter, the *Führungsakademie* Education System is evaluated using the established assessment criteria. The goal of this chapter is to arrive at a solid conclusion as to whether the *Führungsakademie* Education System meets the established requirements. The findings of the evaluation enable an objective, and to a certain degree, qualitative evaluation as to how well the *Führungsakademie* meets the educational requirements of a US professional military education system. The chapter will conclude with an overall subjective evaluation and judgment as to the *Führungsakademie* model's suitability for use by the United States Department of Defense as a professional education model in light of the evaluation criteria.

Criteria Evaluation

The following section evaluates each of the six criteria through the sub-questions.

Criteria 1. Employ predominately active and highly effective instructional methods for the subject matter and desired level of learning. Active involvement of students in the learning process promotes retention, deeper comprehension, and development of professional attitudes.

1) Does the *Führungsakademie* employ active instructional methods for the subject matter?

Rated Answer: Fully Meets

Justification: The wide variety of educational venues employed within the FüAk GSOC significantly contributes to an active set of instructional methods. These academic venues include: large group lectures, small group lectures and briefings given by instructors and students, small group seminars, small group training exercises, exercise simulations, field trips,

and private study.¹¹⁸ The diversity of the educational methods aids in minimizing intellectual stagnation that comes from a narrow spectrum of venues. Additionally, the building block approach found in many FüAk GSOC courses of classroom instruction, small group training exercises and exercise simulations provides an active learning model. In this model, students gain the knowledge, then apply specific educational elements, and finally demonstrate a comprehensive understanding of the entire subject.¹¹⁹

2) Does the *Führungsakademie* employ an educational taxonomy that enables it to achieve the desired level of learning?

Rated Answer: Meets

Justification: The *Führungsakademie* appears to use two different forms of taxonomy. The first is used in the building of the general syllabus, the *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN* (Catalog of Specific Goals and Content of the Syllabus for the National General/Admiral Staff Officers Course). At this level, the taxonomy level is used to match resources, in the form of course hours and education venue, to the to the general syllabus. At the lower level the FüAk GSOC uses a three level taxonomy in its preparation and application of the specific classes within the general syllabus.¹²⁰ Both faculty and students were aware of this lower level of taxonomy however; none of the interviewed individuals was able to easily recall the three

¹¹⁸ *The Führungsakademie der Bundeswehr* Quality Assurance Questionnaire, *Generastabs-/Admiralstabsdienstausbildung Academic Year 2001-2002*. (Hamburg, Germany: *Führungsakademie der Bundeswehr*, Nov 2001). A completed questionnaire provided to the author by *Oberstleutnant i.G. Martin Lütje*, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, during interview by author 26 November 2001. The questionnaire further delineates the percentage of time spent in each venue: large group lectures—15, small group lectures and briefings given by instructors and students—25%, small group seminars—10%, exercise simulations—15%, field trips—5%, and private study—13%, and miscellaneous (language, sports, commandant and academic directors time)—17%.

¹¹⁹ Brooks, Vincent K. *Knowledge is the Key: Educating, Training, and Developing Operational Artists for the 21st Century*. (Fort Leavenworth, Kansas: Army Command and General Staff College. School of Advanced Military Studies, 1992.) p 48. During large group lectures, small group lectures and briefings given by instructors and students, and small group seminars students can generally be seen to attain the first three levels of Bloom's Taxonomy: knowledge, comprehension, and application. Small group training exercises, exercise simulations, and field trips help students gain the last three levels: analysis, synthesis and evaluation.

levels or to produce a written copy of the standardized taxonomy. This implies that while the taxonomy is used for class development, it is not well known. Similarly, it is unlikely used routinely in the assessment of student learning.

3) Do the educational methods involve the student, enabling information retention, comprehension and further the development of professional attitudes?

Rated Answer: Fully Meets

Justification: The FüAk GSOC approach to education encourages student involvement through a wide variety of academic activities. This system, based on the building block approach, has students learn the information and principles first and then apply them in various settings whether in briefings, small group exercises, or large exercise simulations to demonstrate their comprehension. This learning and then doing model aids in retention of knowledge as well as helping the student place his knowledge in an appropriate context.

The *Hörsaal* and tutor system enables close oversight of students by senior officers who have significant leadership and staff experience. Chosen carefully for their character, leadership and professionalism, the tutors serve as the primary agent in ensuring students learn, espouse and practice professional attitudes. This forms a type of institutionalized mentorship between the students and their primary faculty and thus enhances not only the students' professional education but also their professional attitudes.¹²¹

Thus for Criteria 1 the *Führungsakademie* successfully achieves the desired standards for employ active and highly effective instructional methods to achieve the desired level of learning. This effectively involves the students and promotes retention, deeper comprehension, and development of professional attitudes.

¹²⁰ Padberg, Michael, *Oberst i.G.*, Director, Luftwaffe Department, *Führungsakademie der Bundeswehr*. Interview by author, 27 November 2001. *Oberst* Padberg stated that, "There are three levels of hierarchy and all can be quantified and qualified."

¹²¹ The tutors have between ten and eighteen students under their direct tutelage. The tutors teach a large portion of the service specific curriculum but they do not teach the non-service military or non-military subjects. The subject matter experts teach those subjects.

Criteria 2. Assess student achievement. The institution should aggressively assess its students' performance and determine the degree to which instructional methods achieve professional military educational goals and objectives for both individual service and joint forces. Educational goals and objectives should be rigorous and measurable by defined institutional standards. The evaluation program should differentiate among the levels of student achievement and reward students who achieve higher standards.

1) Does the institution aggressively assess student performance in order to determine to what level the student has achieved the established educational goals?

Rated Answer: Meets

Justification: The *Führungsakademie's* student assessment system depends largely on subjective assessment of student performance by faculty members.¹²² In this system, the tutor's assessment is the primary one. The assessment culminates with an officer efficiency report at the end of the two year program. This report includes academic achievement as one of its areas of performance assessment. Thus, the FüAk GSOC does have in place a system that assesses student performance of which a part is dedicated to academic achievement.

However, the FüAk GSOC does not include within its system a quantitative assessment system, one in which grades are issued as an assessment for course work. The FüAk GSOC does not have any graded examinations, quizzes, projects, or written reports.¹²³ This lack of a periodic graded work forces the instructors to make subjective assessment of students' academic performance. This results in a purely subjective form of grading for all academic course work within the FüAk GSOC system. This detracts from a balanced, aggressive assessment of student achievement that has both subjective and objective elements.

2) Are the educational goals and objectives rigorous so as to ensure an appropriate level of learning?

Rated Grade: Fully Meets

¹²² *Oberstleutnant i.G.* Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001. *Oberstleutnant i.G.* Hochwirt, German Army, interviewed by author 29 Nov 2001.

Justification: The educational goals and objectives established by the individual services and the joint forces through the *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN* (Catalog of Specific Goals and Content of the Syllabus for the National General/Admiral Staff Officers Course) set the tone and rigor of the academic course. These goals and objectives set high standards both for breadth and depth of learning for FüAk GSOC students. The mechanisms that transmit this learning are also rigorous as they are applied in the various academic venues throughout the course. Similarly, the individual course goals and objectives appear to be of sufficient rigor to ensure the desired level of student learning throughout the entire course.

3) Does the institution have in place a system that measure and reward students in accordance with their achievement?

Rated Answer: Fully Meets

Justification: The system in place both measures and rewards students in accordance to their achievements. The system is based on two items to accomplish this. First is the officer efficiency report. This facilitates the measuring and recording of the students' achievement throughout the duration of the course. It is a whole person look and takes into account not only academic accomplishment but leadership, officership, teamwork, physical fitness, and the officers' potential. Each service component by means of the officer efficiency report and tutor/course director assessment establishes an unofficial an order of merit list. This list which groups students into the top, middle, and bottom third is used to both counsel students on their performance as well as make follow on assignment recommendations. Generally, those students identified at the top of their class often go to positions of higher responsibility and authority than those below them.¹²³ Thus, students are rewarded for their achievements and potential.

¹²³ *Oberstleutnant* i.G. Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001. *Oberstleutnant* i.G. Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001.

¹²⁴ *Oberstleutnant* i.G. Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001.

For Criteria 2 the *Führungsakademie* GSOC successfully achieves the desired standards for assessment of student achievement. This is achieved through an acceptable system of academic assessment and a strong program that assess the students' combined performance in the FüAk GSOC and rewards this achievement in an apposite manner. In addition, the system establishes and maintains an appropriate rigor through its goals and objectives to ensure the desired level of learning by the students.

Criteria 3. Develop joint awareness, perspective, and attitudes. The stated learning areas and objectives for JPME are to prepare graduates to operate at appropriate levels of war in a joint environment and to generate quality tactical, operational, and strategic thought from a joint perspective. Institutions' mission, goals, and objectives should reflect joint educational requirements to ensure that students are exposed to appropriate joint attitudes while pursuing the joint education curriculum. Student and faculty ratios and student seminar mix should meet specified requirements to ensure a quality joint learning experience.

1) Does the joint curriculum sufficiently prepare officers to capably serve in joint staff and command billets with an appropriate level of joint understanding?

Rated Grade: Fully Meets

Justification: The FüAk GSOC places a large amount of effort and time in the instruction of joint operations. Nearly a third of the curriculum hours allotted to planning, leading and mission conduct in the armed forces are dedicated to joint force topics.¹²⁵ As part of the joint education are the six joint operations simulation exercises conducted during the second academic year. These exercises, conducted in English, cover the full spectrum of military operations and serve to develop a deep level of joint understanding. This emphasis and the associated effort dedicated to classroom and practical knowledge application significantly prepares students for joint duty.

2) Does the curriculum provide enough joint education to ensure that officer have the appropriate joint attitudes to facilitate an acceptable level of service cooperation within a joint operations environment?

Rated Answer: Fully Meets

Justification: The significant percentage of time spent on joint operational subjects at the operational and strategic level clearly provides the opportunity for students to develop appropriate joint attitudes. The six joint operations exercise simulations force students to understand and employ joint forces across the spectrum of conflict. This enables the students to leave the FüAk GSOC with a high level of understanding as well as an appreciation of sister service capabilities and limitations.

3) Does the institution possess the appropriate faculty/student service ratios to ensure a quality joint education?

Rated Answer: Meets

Justification: The faculty ratio between the services within the Joint Operations Department is not optimum. The department is overstaffed in army faculty members and understaffed in naval and medical service personnel.¹²⁶ Thus, to achieve an optimum ratio, navy and medical service officers would replace several army staff members. To mitigate this shortfall the Joint Operations Department relies on the service departments for instructors to provide instruction when unable to meet requirements internally. The student ratio is appropriate with approximately 58% Army, 28% Air Force, and 14% Navy. This ratio meets the appropriate ratio mix to facilitate a quality joint education.

In evaluating Criteria 3, the *Führungsakademie* successfully achieves the desired standards for joint operations education. Clearly, the amount of academic effort focused through time and intellectual resources enables the *Führungsakademie* Education System to provide a high quality joint operations education through instruction in joint knowledge and operational exercise practical experience. Only in the faculty ratio does the *Führungsakademie* fall short of the desired goals but this is somewhat offset through internal cooperation.

¹²⁵ *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Hamburg, Germany: Führungsakademie der Bundeswehr, 20 September 2001). See Table 1.

¹²⁶ Oberst i.G. Winfred Quandt, German Army, Director, Joint Operations and Training Department, Führungsakademie, interview by author 27 Nov 2001.

Criteria 4. Support the needs of the individual services and joint communities. Institution should conduct research to determine curriculum and instructional effectiveness of the program. Results of these analyses should be used to refine or develop curricula relevant to the requirements of the individual services and joint communities. Curriculum evolution should reflect changing realities.

1) Does the institution conduct the appropriate level of research in order to determine curriculum and instructional effectiveness?

Rated Answer: Fails to Meet

Justification: According to the information received, the *Führungsakademie* conducts only one formal element of research in order to determine curriculum and instructional effectiveness.¹²⁷ This formal research is in the form of a questionnaire sent to graduates approximately one and one half years after graduation. The purpose is to find out how well the students believe the FüAk GSOC prepared them for their initial duty after graduation. Apart from this single survey, information gained as to curriculum and instructional effectiveness comes by way of informal means. The *Führungsakademie* does not aggressively seek information on its performance. Rather, the mechanism for change appears to be from individual *Führungsakademie* officers (e.g. officers who have just returned from the *Führungsakademie* support of NATO peacekeeping operations in the Balkans, etc.), the separate services, and the joint force staff into the *Führungsakademie*.¹²⁸ The services are left to perceive a need and direct a change within the FüAk GSOC curriculum. Thus, the *Führungsakademie* is assessed to passively collect data on its curriculum and instructional effectiveness and largely wait for direction from individual officers assigned to the *Führungsakademie*, individual service components and joint force staff for feedback.

2) Does the institution actively analyze this research in order to improve its curriculum in concert with individual service and joint community needs?

¹²⁷ *Oberstleutnant i.G. Martin Lütje*, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001.

Rated Answer: Undetermined

Justification: The single formal research element and the numerous informal research methods were not researched in significant detail to validate an assessment.

3) Is there an established system that is appropriately responsive and enables curriculum modification once new requirements have been identified by individual services and/or the joint community?

Rated Answer: Fully Meets

Justification: While the *Führungsakademie* heavily relies on outside input from individual services and the joint force staff to direct curriculum change, a system is in place to responsively enable curriculum modification. The key elements to this system are the G-3 Training and Instruction Planning section, the *Lehrgangprojekt Organization* (Course Project Organization or CPO), and the individual *Führungsakademie* academic departments. These elements working in concert enable a responsive, focused, and coordinated effort in the modification of the FüAk GSOC curriculum. These individual elements work together routinely to assess current and future curriculum issues. As a result, the CPO components are well versed in their own and fellow component responsibilities, authority, and capabilities. Under the central guidance of the Director of Faculty, the CPO maintains focus and power to implement the required changes.¹²⁹ Thus, the *Führungsakademie* does have and does use a system that is responsive and enables curriculum change when the need arises.

Evaluation of Criteria 4 shows that the *Führungsakademie* largely fails to achieve the appropriate level of formal validation and research as to its academic and instructional success. The *Führungsakademie* lacks a significant formal research mechanism to assess its performance and therefore relies on informal formal feedback. This lack of a formal research mechanism

¹²⁸ Oberst i.G. Helmut Muhl, German Army, German Army Liaison to the Combined Arms Center, Fort Leavenworth, Kansas, interview by author, 9 April 2002. The *Führungsakademie* has a standing commitment to supply three officers annually for a six month tour in either Bosnia or Kosovo.

largely requires the *Führungsakademie* to rely on either direct input and participation from the individual services and the joint staff in order to adjust its curriculum significantly or from internal faculty members who bring with them recent experiences and identify shortfalls. This relying on outside input lessens the control and responsiveness of the *Führungsakademie* to change requirements and forces them to rely heavily on internal faculty expertise and experience. However, once a change requirement is identified the *Führungsakademie* has a responsive system in place to effectively process, plan, and implement the desired change.

Criteria 5. Conduct a quality faculty recruitment, selection, assignment, retention, development, and performance assessment program. Faculty should have the academic credentials, teaching skills, and command and staff experience in individual service and joint tactical, operational, and strategic matters needed to teach the applicable service and joint education. Military instructors should be of appropriate rank and serve as role models for students. The institution should have a faculty development program dedicated to improving instructional skills, increasing subject matter mastery, encourage thinking, and maintain currency in subject areas. Policy and manning should provide for research and publication by faculty members. Time and funds to attend conferences should be provided to promote academic vigor and allow faculty to acquire state-of-the-art currency in areas of expertise. Institutions should hold faculty accountable for clearly defined and measurable faculty and staff performance criteria and standards.

1) Does the faculty have the appropriate academic credentials, teaching skills, and command and staff experience in individual service and joint tactical, operational, and strategic matters needed to teach the applicable service and joint education?

Rated Answer: Meets

Justification: The *Führungsakademie* makes significant effort to place the faculty officers who have credible, recent, and proper knowledge and experience within the proper instructional area. To aid in this process the *Führungsakademie* has established minimum job qualifications for each faculty and staff position.¹³⁰ The *Führungsakademie* is able to fill a significant portion of

¹²⁹ Oberstleutnant i.G. Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001.

¹³⁰ Oberst i.G. Volkel Bertel, German Army, Instructor, Security and Strategy Department, *Führungsakademie*, interview by author 29 Nov 2001. As an example, certain positions within the Security and Strategy Department require instructors who have experience in arms control/disarmament and United Nations and North Atlantic Treaty Organization strategy.

its faculty positions with fully qualified individuals as per the stipulated job requirements.¹³¹ Two factors combine to aid in this. First is that the *Führungsakademie* largely seeks to fill its faculty and staff with General Staff Officers. This enables the General Staff Officer personnel system to control a significant portion of the assignments at the *Führungsakademie*. This control facilitates placing qualified General Staff Officers at the *Führungsakademie* without interference from other branch personnel systems effectively raising the quality of the faculty. Secondly, assignment at the *Führungsakademie* is considered “good” duty. Officers recognize that assignment to the *Führungsakademie* is most often at least a lateral move and often an upward move. Additionally, strong performance at the *Führungsakademie* is generally rewarded with placement in a desirable job once duty at the school has been completed.¹³² Thus, this enables the *Führungsakademie* to obtain high quality faculty with the desired expertise and experience to fill a significantly large percentage of its faculty positions.

2) Are the faculty of sufficient character, experience, and rank to successfully serve as role models to the students?

Rated Answer: Fully Meets

Justification: The *Führungsakademie* closely controls this aspect of its staff manning. As a result, those officers on the faculty that have significant interaction with and control over the students’ education are carefully selected for their character, experience, leadership abilities, and personality.¹³³ Specifically, the tutors, course leaders and service department instructors are officers hand picked for duty at the *Führungsakademie*. These officers realize their role is not just the intellectual preparation of the students but also the character, physical, emotional,

¹³¹ *Oberst i.G.* Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001. As an example, *Oberst* Quandt noted that several (3 out of 13) of the instructors in the Joint Operations and Training Department did not have joint experience.

¹³² *Oberstleutnant i.G.* Pedro Renn, German Luftwaffe, interview by author 26 Nov 2001.

¹³³ *Oberstleutnant i.G.* Michael Hochwart, German Army, Tutor, *Führungsakademie* Army Department, interview by author 29 Nov 2001.

spiritual preparation of the students to serve in the future. The tutors and the course directors specifically serve as role models and mentors for the students under their watch.¹³⁴

3) Does the institution have a faculty development program that enhances faculties' instructional skills, subject matter mastery and currency?

Rated Answer: Partially Meets

Justification: The *Führungsakademie* has in place a faculty development program for incoming instructors. The program elements are a six week course in didactic method and a short period of academic supervision. This program focuses on ensuring the new instructor is trained in educational methods and appropriately instructing the assigned course material to achieve the educational objectives. This program raises the instructional ability of incoming faculty to meet the acceptable standards.

The *Führungsakademie* does not have a formalized program for the continuing education of its faculty members. The matter of subject matter mastery, continuation training and subject matter currency is left to the individual department and ultimately to the individual instructor. No requirements and no written expectation of individual continuation training were in evidence at the *Führungsakademie*. As stated by a department director, attendance of faculty at seminars and continuing education courses are encouraged but individuals are responsible to develop themselves.¹³⁵ Short tenure of a portion of the faculty partially mitigates the lack of a formalized continuing education program. However, faculty members who teach specialized subjects tend to remain longer than non-specialized instructors. Depending on the specialized subject, these instructors could quickly fall behind current trends and future developments thus providing

¹³⁴ Major Soehnke Mahrarens, German *Luftwaffe*, FüAk GSOC 2000 student, interview by author 28 Nov 2001. *Hauptmann* (Captain) Jesko Peldszus, German Army, FüAk GSOC 2000 student, interview by author 29 Nov 2001. *Oberstleutnant* i.G. Pedro Renn, German *Luftwaffe*, interview by author 26 Nov 2001. *Oberstleutnant* i.G. Renn stated that the tutors requirements (November 2001) are: successful battalion command, operations career field, German Ministry of Defense (MOD) experience, North Atlantic Treaty Organization (NATO) staff experience, and outstanding officership. The hard and fast requirements are battalion command, operations experience and outstanding officership. Not all tutors presently serving at the *Führungsakademie* had both MOD and NATO experience.

increasingly lower quality of instruction. Only individual initiative prevents this from occurring. Thus, the lack of a systematic and pro-active continuation training policy falls short of positive insurance that instructors remain current within their assigned area of expertise.

4) Does the institution have a faculty assessment system to ensure appropriate academic performance?

Rated Answer: Fully Meets

Justification: Faculty assessment falls within the standard German military officer efficiency reporting system. Faculty members receive the standard bi-annual efficiency report. This report not only assesses the officer's primary duty performance but overall officership, leadership as well as staff and command potential. Raters gather information on faculty performance through several means including direct observation, student and fellow faculty critiques, and observation of job performance output. The comprehensive and flexible nature of the officer efficiency report enables a detailed assessment of faculty performance. The only drawback to this system is its bi-annual timing. This then allows instructors to go as long as two years before a major evaluation. Periodic performance counseling aid in covering this extended time period between official written evaluations.

By and large the *Führungsakademie* is staffed with high quality officers who possess the appropriate credentials, experience, and subject matter expertise to instruct the next generation of staff officers. Current operational demands, limited funding, and rapidly developing areas of military operations (e.g. joint operations) have limited the *Führungsakademie* ability to fill each and every position with fully qualified instructors. Acknowledging this shortfall, the *Führungsakademie* aggressively recruits instructors who are as highly qualified as possible. Additionally, they have a vigorous guest speaker program where non-resident subject matter

¹³⁵ Oberst i.G. Winfred Quandt, German Army, Director, Joint Operations and Training Department, *Führungsakademie*, interview by author 27 Nov 2001.

experts are used to educate FüAk GSOC students.¹³⁶ This enables the *Führungsakademie* to use a wide variety of diplomatic, academic, military, and non-military personnel to facilitate the accomplishment of the established educational goals.

However, the *Führungsakademie* directorates do not place adequate emphasis on continued instructor education either in didactic or specific subject matter areas. The emphasis on continued education is placed on the individual faculty member and thus no standard of expectation or execution is enforced. This then allows for a wide variance of relative expertise depending on subject matter, rate of subject matter change, faculty member tenure, and individual officer initiative. This notwithstanding, the *Führungsakademie* is able to recruit, assign, retain, and initially develop a high quality faculty capable of meeting the academic goals established to educate the next generation of Bundeswehr general staff officers.

Criteria 6 The institution's education should be broad based enough to provide the graduate with an understanding and appreciation of factors at the operational and strategic levels that are likely to influence future military operations. The graduate's education should enable him to understand, appropriately react to, and successfully deal with future change at the tactical, operational, and strategic levels of war. The graduate should be educated so as to make significant and positive contribution to military operations at increasing levels of staff and command responsibilities in the future.

1) Does the student receive an education that is broad enough yet detailed to facilitate an appropriate level of understanding of factors that will and potentially will effect future military operations?

Rated Answer: Fully Meets

Justification: The *Führungsakademie* academic program is specifically structured to educate officers at three levels, tactically, operationally, and strategically. The building block approached used initially focuses emphasis at the tactical level as students spend a large portion of their first year learning about and performing exercise simulations at the battalion through corps level within their own service. This ensures that they are experts at the tactical level and well versed in

¹³⁶ Major Robert E. Hamilton, US Army, FüAk GSOC 2000, "German Armed Forces Staff College In-Progress Report #1, January 2001. Examples of guest lectures include author Martin van Creveld and

combined arms operations. The next level, the operational level, is given a significant amount of emphasis both in course hours and in number of exercise simulations conducted. Here, students receive a significant amount of joint operations education and simulated experience. Additionally, students are educated on strategic topic areas. This level receives less time and emphasis than the operational and tactical levels. However, the breadth of topics included within the strategic area serves to give the student a well rounded and comprehensive familiarity with strategic level issues, policy, thought, and theory. Thus, an educational pyramid is formed where the tactical area forms the basis, the operational level is applied above and the strategic area serves as a capstone.

With this educational methodology, the student has a two-fold capability. First, he has a significant sense of the relationship of tactics, operational art and strategic matters. Secondly, he has been given a significant foundation upon which to continue his learning particularly at the operational and strategic levels. This then better prepares the student for both short term staff officer duties, whether at the tactical, operational, or strategic level, as well as future command and staff duties at higher levels. Thus, the broad education while retaining its main focus on the tactical and operational levels, does sufficiently encompass non-military specific studies and provide familiarity with the strategic level. It is assessed to fully meet the requirements. This education does provide graduates with an appropriate level of understanding of the factors that will and potentially will effect future military operations.

2) Does the student's education appropriately equip him to deal with future change at the tactical, operational, and strategic level of war?

Rated Answer: Undetermined

Justification: Not enough data was gathered to enable an appropriate level of analysis to be made on this subject. A detailed analysis of the syllabus and individual course content is required

German Ambassador to the United Nations. The latter class was conducted by video teleconference.

to adequately answer this question. This level of specificity is beyond the scope of this monograph.

3) Does the education give the student the required tools and develop the appropriate attitudes to enable the student to continue to make significant and positive contributions to military operations at increasing levels of responsibility?

Rated Answer: Fully Meets

Justification: The FüAk GSOC education is entirely focused on developing and educating already high quality officers to an even higher level. The *Führungsakademie* Educational System focuses on developing both the technical and professional competence of the future general staff officer. The technical area of education focuses on imparting to the student a deep and useful knowledge of the science of the profession of arms. The education of professional competence is focused at developing the students' skill as a practitioner of the art of warfare as well as the character required to both command units and lead as a staff officer. With these two primary areas of emphasis, the *Führungsakademie* is assessed to fully meet the objective of equipping the officer with both the tools and the attitudes required to make significant and positive contributions to military operations at increasing levels of responsibility

Having evaluated the *Führungsakademie* Educational System against the six established criteria, it can be seen that the FüAk GSOC fully meets a significant portion of the criteria. The *Führungsakademie* Educational System exhibits both weaknesses and strengths. The *Führungsakademie's* weaknesses are reviewed first.

The *Führungsakademie's* significant weaknesses are in its research of curriculum and instructional effectiveness and faculty continuing education programs. Critical to an institution's education remaining of significant value and utility is the degree, speed, and accuracy with which the institution can modify its curriculum to meet present and anticipated future demands. The curriculum modification system requires several components; an element which detects the needed change, an element which effects the curriculum and course modification and an element

which validates the success of the curriculum modification both internal and external to the educational institution. The *Führungsakademie* is deficient in two of these areas, the element that detects the need for change and the element that validates the success of curriculum change.

In the first instance, the *Führungsakademie* relies on individual faculty members, the individual services, and the joint forces staff to initiate or direct change to the curriculum. Currently, the *Führungsakademie* largely acts as four separate schools under loose administrative control of the *Führungsakademie* Commandant for service specific items.¹³⁷ Outside of the individual service areas the services cooperate with the other academic departments for curriculum change. This generally makes the *Führungsakademie* reactive to the need for change and slows the institution's ability to incorporate changes more rapidly. If the *Führungsakademie* had a system in place whereby it actively researched and sought out input from each of the services and the joint forces then, the *Führungsakademie* would better be able to synthesize, synchronize, and begin action for curriculum modification. This would enable both inputs from the services and joint force staff as well as initiation of change by the *Führungsakademie* itself. Properly staffed this could relieve each service from having to do direct mundane changes, allow the *Führungsakademie* to standardize common curricular items between the services, and provide a conduit of increased speed and quality between the FA and the individual services and joint staff. Once the change has been identified, the *Führungsakademie* has in place a sound program for formulating, directing, and implementing curriculum changes. However, follow up of how effective the curriculum is the other weak area of the *Führungsakademie* Educational System.

This second area needs significant improvement. Currently, the *Führungsakademie* relies on one formal survey and informal surveys to determine how well it has performed its educational duties. The formal survey sent to graduates near the end of their first assignment after graduation

¹³⁷ The separate schools are the army, air force, navy, and joint operations.

is the only formal feedback mechanism used.¹³⁸ Several informal feedback mechanisms are used but these are not codified and thus do not provide consistent and structured information on the success of the *Führungsakademie's* educational program. Thus, the *Führungsakademie* has no significant ability to systematically gather information to assess and analyze either the quality of its graduates or the effectiveness of its curriculum. Were an effective feedback and analysis program in place, the *Führungsakademie* would be able to perform the third element which validates the success of the curriculum modification external to the educational institution. This is critical to the institution's education remaining of significant value and utility and its ability to meet present and anticipated future demands. As a counterbalance to these weaknesses, the *Führungsakademie* possesses several key strengths.

The *Führungsakademie* strengths lay in its academic program, joint education, and faculty quality. The academic program encompasses the curriculum, academic venues, and exercise simulations. The curriculum is well balanced to provide students with an appropriate level of education at each of the tactical, operational, and strategic levels. The diversity of the curriculum to include non-military specific subjects provides a needed and valuable understanding of critical elements that effect all military operations and significantly enhances officer capabilities in both staff and command. Thus, the proportionality of education in military—non-military and tactical—operational—strategic levels ably prepares a student to operate at all staff levels beginning with his initial assignment after graduation.

The curriculum is applied through a wide variety of academic venues. These venues aid in student participation, knowledge acquisition, and the deterrence of academic monotony. Likewise, they allow the most suitable venue for the topic to be selected. One of the most important venues is the exercise simulation. The *Führungsakademie* has focused a significant amount of money and resources to build and run a state-of-the-art simulation facility. This

¹³⁸ Oberstleutnant i.G. Martin Lütje, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*, interview by author 26 Nov 2001.

facility in conjunction with highly developed exercise scenarios enables students to put into practice what they have learned in the classroom and elsewhere. The value of high fidelity simulations cannot be underestimated and certainly, the *Führungsakademie* capitalizes on this capability.

The next strength of the *Führungsakademie* is in its joint education. It is an oft-quoted axiom that militaries will only fight jointly. The *Führungsakademie* has taken this to heart and it provides a strong joint education to all of its students regardless of service. First, it is most obvious that having all of the services together at the same institution is critical for joint service education. Secondly, joint classes lay the groundwork for understanding of sister service capabilities and joint operations requirements and procedures. Finally, the six well developed and integrated exercise simulations force students to apply joint operating procedures for the accomplishment of difficult and realistic joint objectives.

Both the curriculum and its execution and the joint operations education would not be possible without a high quality faculty and staff. The importance of the *Führungsakademie* as an institution within the Bundeswehr can readily be seen by the quality of its faculty members. Education of future staff officers has been and continues to be of significant importance to the German military. Thus, the *Führungsakademie* actively recruits, assigns, and rewards officers who exhibit high standards of character, technical competence, and professional officership. These officers are viewed as critical to the success not only of the present German Armed Forces but to the success of the future German Armed Forces as they serve as the primary educators and role models for future general staff officers. They are clearly investing in the future despite the costs of the present.

In an overall assessment, the *Führungsakademie* Educational System meets the established requirements directly derived from the Chairman, Joint Chiefs of Staff Program for Accreditation of Joint Education. The key intent of the requirements is to provide a sound, rigorous education to students with emphasis on producing officers who have a significant understanding of joint

operations. Coupled with this understanding is an attitude that embraces jointness and professionalism throughout the spectrum of conflict. The *Führungsakademie* Educational System fully meets this major intent. Additionally, the *Führungsakademie* goes far beyond this intent to ensure that graduates are officers of character who have the tools and education to successfully lead both on the staff and in command of increasing responsibility. The education focuses on the person of the officer; striving to prepare an officer of character well versed in the art and science of warfare and well prepared to face the challenges of military leadership in the future.

Given the quality, demanding standards, and the breadth and depth of the education provided by the *Führungsakademie*, the *Führungsakademie* Education System could very well be used as a model for the United States Department of Defense professional military education system. Certainly, there are elements that the individual American services and the Department of Defense professional military education systems would be wise to incorporate as they strive to produce the best educated professional officers for the defense of America. The next chapter will present those recommendations.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

The German *Führungsakademie* Education System provides much to consider when seeking ways to increase the United States military officers' knowledge, skill, leadership abilities, and staff capabilities through professional military education (PME). This chapter will make a number of recommendations that would lead to an improvement in the professional education of the American officer and thus his capability to assume and meet the requirements of higher levels of command and staff. The recommendations fall into two categories. Category one is the broader and encompasses all Intermediate Service School (ISS) level military professional education and joint education. Category two deals specifically with US Army Command and General Staff College (CGSC) and Advanced Military Studies Program (AMSP) recommendations. The recommendations will be stated and the rational given.

Intermediate Service School and Joint Professional Military Education Recommendations

Recommendation 1: Establish a joint Advanced School Program (ASP) focused on operational art as part of the National Defense University.¹³⁹

Rational: Currently there is no joint ASP school. The Armed Forces Staff College has a three-month program established to qualify joint service officers (JSO). However, the ability of this three-month course to educate officers in joint operations is obviously limited when compared to a year long ASP level course. Thus, officers are familiarized with joint operations rather than being educated in and inculcated with appropriate joint attitudes that would facilitate a higher level of service cooperation within a joint operations environment. The current level of

joint education and joint understanding limits the ability of the US to employ joint forces to their maximum potential. The establishment of a year long joint ASP would significantly improve American military forces synergy in joint operations.

The Joint Advanced School Program (JASP) should focus on operational level warfare with a goal of producing an officer well educated in the joint operational art. To educate these officers most appropriately, the curriculum should include upper level tactics as well as strategic level information. Likewise, the curriculum should also include a broader scope of non-military specific subjects such as economics, political science, law, and social sciences. This then would result in an officer well versed in joint operational art, doctrine, and theory. These officers would be of particular utility on and should be assigned to the Joint Staff, Commander-in-Chief (CINC), Joint Task Force (JTF), and high level service staffs.

While National Defense University (NDU) normally focuses on strategic level issues and education, incorporation of the JASP within NDU would create several advantageous situations. First, NDU faculty would teach the strategic level courses in the JASP. This allows for more standardization of strategic level curriculum within the Department of Defense (DOD) and an economy of faculty. Second, operational level instructors within JASP could teach the upper operational courses at the National War College and Industrial College of the Armed Forces; again gaining standardization and economy. Third, integrated exercise simulations between the strategic level and operational level could be accomplished. This would add realism to both levels of simulation. Fourth, the location in Washington D.C. would significantly facilitate the use of senior military leaders, US Government leaders, area university professors, and think tank personnel as guest speakers and adjunct faculty to the JASP. Fifth, once established, the JASP

¹³⁹ Advanced School Programs (ASP) are the advanced schools attended by Intermediate Service School graduates. Currently, the US Army's school is School of Advanced Military Studies (SAMS), the US Air Force is the School of Advanced Airpower Studies (SAAS), and the US Marine Corps is the School of Advanced Warfighting (SAW).

could replace Armed Forces Staff College by assuming the familiarization training for JSO's as a separate course from the year long JASP course.

The establishment of the JASP educational program within NDU would put all joint operational and strategic level education under one umbrella and thus, truly create a university at the joint level.

Recommendation 2: Broaden the Intermediate Service School and Advanced School Program curriculum to include increased levels of non-military subjects and joint military operations education.¹⁴⁰

Rational: The object of ISS and ASP is to produce staff officers capable of serving on a wide range of military staffs. Currently, graduates of ISS/ASP are assigned to tactical, operational, and strategic levels of staff. Thus, many graduates find themselves serving on or being temporarily detailed to serve on single service or joint staffs at the operational or strategic level. Because of the ISS/ASP focus at the single service tactical and operational levels, many officers are not appropriately educated in joint and non-military subjects to effectively fulfill their staff responsibilities. The curriculum needs to be broadened to ensure officers receive the education they need to fulfill the duties in which they find themselves.

The paradigm has changed from the era where only senior officers dealt with operational, strategic, and non-military specific issues. Now, lieutenant colonel battalion commanders find themselves as “mayors” during peacekeeping operations or as key staff members on a division-turned-JTF staff. Majors find themselves as action officers working joint, strategic level, and political-military integration issues and as brigade key staff during multinational joint operations. Despite this change in the responsibility and requirements placed on majors and lieutenant

¹⁴⁰ The phrase “non-military subjects” is used to categorize all subjects, courses, and classes that deal with topics where non-military policy, doctrine, theory, actions, or influence are preponderant. Examples include: geopolitics, international security strategy, economics, political science, non-military history, and information technology, etc.

colonels prior to Senior Service School (SSS) attendance, education at ISS has not been modified sufficiently to keep pace with these new requirements.

To meet this new paradigm, ISS/ASP curriculum must be broadened to properly equip officers to successfully meet the new demands placed on them. The *Führungsakademie* curriculum serves as a useful starting place when looking at the subjects required by field grade officers in the 21st Century. The *Führungsakademie* inclusion of such subjects as world politics, geopolitics, national and international geography, political theory, economics, international law, human rights, communications theory, and leadership theory demonstrate the breadth needed to educate officers in non-military areas. Likewise, the requirements for operating in a joint environment have significantly increased with again no equivalent increase in ISS/ASP joint operations education.

Currently there is no requirement to receive joint duty qualifying education prior to or even during a joint staff duty assignment.¹⁴¹ However, many ISS/ASP graduates officers are serving as action officers in joint duty assignments. Additionally, ISS/ASP graduates find themselves on staffs and in command of units within a joint task force. These officers would benefit from receiving a joint education before assuming these field grade duties. With this in mind, each ISS/ASP graduate should receive education that completes the requirements for Phase II Joint PME. Clearly, the graduates of the *Führungsakademie* are educated to a Phase II Joint PME level, if not significantly higher.

Receiving Phase II Joint PME at this early stage would have several benefits. First, it would prepare officers at a more appropriate time and better match joint education with joint operation officer requirements.¹⁴² Secondly, it would build better understanding and appreciation for joint operations throughout the ISS/ASP graduate officer corps and lead to a higher level of joint-

¹⁴¹ Only a small portion of joint duty assignments require Joint Service Officer qualifications. JSO qualifications require Phase II Joint PME, a previous joint duty tour of appropriate length, and board selection.

mindedness across the armed forces. Third, it would provide a wider cross section of trained officers suited for joint duty staff assignments and better prepared for joint operations in the field.

Currently, the education of field grade officers at ISS/ASP courses does not meet the operational and staff requirements placed on the graduates. By sufficiently broadening the curriculum in both non-military subjects and joint operations, officers would be much better prepared to meet the needs and requirements of military operations in the 21st Century.

Recommendation 3: Improve the quality of faculty at the Intermediate Service Schools and Advanced Schools Programs.

Rational: One of the obvious attributes of the *Führungsakademie* Education System is the high quality of its faculty. This comes directly from a culture where quality education is recognized as important, beneficial, and necessary. Unfortunately, the US military, in general, does not share this belief to the point where it recruits, assigns, academically develops, and rewards ISS faculty.¹⁴³ To significantly elevate the quality of education provided at the ISS/ASP level, a cultural change must take place.

This cultural change must redefine the importance of PME. This change must include several elements. First, up and coming leaders in each service must be assigned to faculty at the ISS/ASP level. This would demonstrate that education of future officer leaders is very important to the service and requires the best to teach the best. In addition, it would clearly show that the road to the top is not solely defined by peacetime tactical unit command and high-powered staff assignments but rather by a serious, continued, and balanced preparation for larger command and staff responsibilities in wartime. Secondly, officers who have performed well as faculty members must be rewarded with excellent follow-on assignments. This would verify that the culture has changed when faculty members continue to be upwardly mobile and not penalized by a tour as an

¹⁴² Currently, joint officer billets exceed the Armed Forces Staff College training capacity and not all officers in joint billets are able to attend the joint staff officers' course.

¹⁴³ One need only look to the US Army Command and General Staff College where graduation from the Command and General Staff Officers Course is not a requisite for service on the faculty.

ISS/ASP faculty member. Third, officers assigned as faculty members must be developed academically. This development comes in many forms such as service-sponsored attendance at civilian institutions for graduate degree programs, didactic courses for new instructors, and service-sponsored attendance at professional conferences and educational symposiums. Fourth, ISS/ASP must invest in acquiring and maintaining high quality civilian professors. Like respected civilian institutions, these civilian faculty members must be forced to remain current and relevant in their knowledge and presentation methods. They must receive direct support as they strive to continue their education and remain at the forefront of their disciplines.

The investment in raising the quality of the faculty is a significant one. However, to not invest in a continued and regenerating quality faculty is to doom the educational system to mediocrity at best and failure at worst. Thus, a strong, vibrant, and high quality faculty is central to an education system whose goal is to educate officers in disciplines of such paramount importance to the vitality of the United States of America.

Recommendation 4: Improve the quality of exercise simulations within the Intermediate Service Schools and Advanced Schools Programs.

Rational: The Prussian-German education system has always placed a high emphasis on exercise simulations.¹⁴⁴ Today the *Führungsakademie* continues to place significant importance on exercise simulations. To this end, they have created a state of the art facility that greatly enhances the realism, utility, and educational capability of computer aided simulation. However, their continued emphasis is on the education and training of the individual and not on the computer. With this, the computer is not the centerpiece of the exercise but appropriately remains in the background.

American ISS/ASP must gain the significant benefits derived from exercise simulations. However, to do this requires a dedication and investment similar to the one made by the

¹⁴⁴ Before computers were invented and computer simulations were available, exercise simulation was referred to as wargaming.

Bundeswehr at the *Führungsakademie*. First, a purpose built facility is required. This allows the full benefit to be gained from the exercise simulation through properly sized, equipped, and integrated workspace. Secondly, simulation software dedicated to support ISS/ASP academic educational objectives must be developed and continually updated. The multiple software programs required must be capable of supporting the wide variety of simulations from the tactical to strategic level and include integration between warfighting levels. Third, high quality technicians, preferably military, must be employed to ensure the operability of the system. A military officer intimately familiar with the goals and objectives of the institution being supported must oversee these technicians to ensure successful mission accomplishment. Finally, the simulation center must receive strong funding support to enable modifications and growth of simulation software and hardware to meet changing needs.

Field forces have received enormous benefits through the use of simulators, both weapons system and battle command. However, PME institutions have not kept pace with the increased education and training capabilities of new technology or the purpose designed simulation software.¹⁴⁵ Proper use of this capability would significantly enhance ISS/ASP courses by the creation of realistic scenarios where students put into practice what they have learned at all levels of warfare and across the spectrum of conflict.

US Army Command and General Staff College (CGSC) and Advanced Military Studies Program (AMSP) Recommendations

Recommendation 5: Relocate the Command and General Staff College and Advanced Military Studies Program to Carlisle Barracks, Pennsylvania and create an Army University.

Rational: The goal of this move would be to achieve intellectual synergy by bring the senior tactical, the operational, and the strategic level schools together under one structure in one

¹⁴⁵ The School of Advanced Military Studies relies in part on commercial, off-the-shelf, entertainment wargames.

location.¹⁴⁶ There are several significant benefits achieved by the near term move of AMSP and the subsequent move of CGSC to Carlisle Barracks and the consolidation of US Army ISS, AMSP, and SSS.

First, is the gain achieved by pooling academic resources. Instructors could specialize in narrower subject, because of the increased size of faculty. These instructors would be able to teach at several different levels in the different schools. As an example, a military theorist specializing in von Clausewitz' writings could teach a single period overview class at CGSC, an operationally focused set of theory classes at AMSP, and a strategic level set of theory classes at the Army War College (AWC). Another pooling of academic resources would be in the library where the combined assets of the Combined Arms Research Library and the Military History Institute would likely create the world's best army research facility. Similarly, the combining of the publishing capabilities of the *Military Review*, *Parameters*, and the Strategic Studies Institute would enable the creation of an Army University Press. This press would be responsible for not only publishing the aforementioned publications but could be used to publish educational materials for use in the different Army University schools.

Second, combined prestige of CGSC, AMSP, and AWC in conjunction with proper funding would facilitate the recruitment and retention of a more robust and higher caliber of civilian faculty. The increase in number of faculty would facilitate academic debate, cooperation, stimulate academic achievement in and out of the classroom and avoid the academic isolation and stagnation professors currently experience at Fort Leavenworth. Similarly, the movement of CGSC and AMSP to Carlisle Barracks would eliminate the current penalty CGSC and AMSP pay for their remoteness from centers of civil, military, and academic importance. The move would

¹⁴⁶ Currently, the three other services have collocated their intermediate and senior level service schools at one installation. The USAF has formed Air University (AU) at Maxwell Air Force Base, Alabama. AU is home to all levels of officer PME from the basic aerospace course through Air War College. The USMC has formed Marine Corps University at Quantico, Virginia. Marine Corps University houses the Amphibious Warfare course for captains through Marine War College. The Navy conducts its intermediate and senior level PME at Newport, Rhode Island.

greatly increase these schools exposure to and benefit from subject matter experts across the range of military and civil-military affairs. A further benefit would be to increase AMSP students exposure to a wider range of experienced and trained educators, both military and professional, and decrease the almost complete reliance on Advanced Operational Art Studies Fellows currently required in AMSP.

Third, the collocation of the three schools would allow cross utilization and crosspollination of students between the schools. For example, War College students could serve as brigade, division and corps commanders and senior staff during CGSC exercise simulations as well as division, corps, land component commanders and CINCS during AMSP exercise simulations. Thus, more appropriate individuals are benefiting from the interaction than presently occurs. Likewise, graduates from the war college could be retained as faculty for CGSC and AMSP and help reduce permanent change of station requirements.

Fourth, the move of CGSC and AMSP to the east coast would significantly increase the ability and ease of travel to important military locations. These locations are classified as civil government, military institutions, and historically significant sights. Obviously the proximity of Carlisle Barracks to Washington D.C. would enable visits to the key elements of US Government allowing students to be exposed to government and military leaders and vice versa. Likewise, the proximity to the Pentagon, NDU, Norfolk, Quantico, and Fort Monroe, etc. would facilitate travel between the schools and significantly increased interaction between the schools and the institutions at these locations.¹⁴⁷ The availability of significant military and non-military historic sites would increase dramatically. This would facilitate more frequent and higher quality staff rides for battle and campaign analysis. Additionally, students would gain better historical understanding in both scope and context from visits to battlefields, non-military significant historic points of interest, as well as military and non-military museums.

While the initial investment would be substantial, the long-term benefits of a consolidation of CGSC, AMSP, and the Army War College in one location at Carlisle Barracks, Pennsylvania are considerable. If the US Army is going to keep pace with its sister services and with general education practices, principles, and facilities, it must pool its resources to gain a synergistic effect that will ensure that its officers receive the best military education possible.

Recommendation 6: AMSP increase its curriculum by matriculation of students upon completion of the Command and General Staff Officers Course core curriculum courses.

Rational: CGSC students have met the minimum Military Education Level (MEL) 4 requirements when they complete the Command and General Staff Officers Course (CGSOC) core courses.¹⁴⁸ This occurs in December at the end of Term One. In order to achieve a breadth and depth of curriculum similar to the *Führungsakademie*, AMSP should begin its curriculum immediately after the completion of CGSOC core courses. This would expand AMSP's available time for advanced education from its current forty-eight weeks to around seventy weeks, a forty-five percent increase.¹⁴⁹

The increased available time should be spent on an expanded AMSP curriculum that includes the current AMSP courses plus additional courses on joint and non-military specific subjects. Specifically, courses and exercise simulations that result in a Joint PME Level II certification should be included. In addition, courses that prepare AMSP graduates for a broader service beyond division and corps level staffs should be included. Recommended courses include: military leadership and leadership theory, national security policy, military and international law, defense technology, military-media communications, civil-military cooperation, world and geopolitics, national and international geography, political theory, economics, and

¹⁴⁷ Norfolk is home to Joint Forces Command, Quantico is home to the United States Marine Corps University, and Fort Monroe is Headquarters, Training and Doctrine Command, which is responsible for US Army PME.

¹⁴⁸ Reserve component officers attending the truncated CGSOC course leave after completion of the core courses and MEL 4 qualification. Additionally, active duty officers receive MEL 4 credit after completion of the CGSOC core curriculum.

communications theory. The AMSP curriculum more than makes up for the twelve CGSOC classes students are required to take during Terms Two and Three.

With this breadth of education, AMSP graduates would be more capable and qualified to serve on not only army division and corps staffs but on the Joint Staff, CINC and JTF staffs as well as the Army Staff. Furthermore, they would be better prepared to assume leadership responsibilities as battalion commanders having received this broadened education.

By matriculating AMSP students at the end of CGSOC Term 1, AMSP gains a significantly longer period within which to educate its students. The time gained from CGSOC would enable AMSP students to receive a more beneficial education of a higher quality and to a higher academic standard than if they remained in the CGOSC curriculum. The resulting product would be a better, more broadly educated officer capable of service on wider and higher staff levels as well as one more capable of meeting the challenges at increased levels of future command and staff responsibilities.

Recommendation 7: Increase incentives for attending Advanced Military Studies Programs.

Rational: Currently, SAMS is not able to recruit all of the best and brightest officers to attend AMSP or enroll them in the program. While there are many reasons for this, several key reasons deter highly qualified officers from applying to AMSP. The following suggestions aim at sufficiently increasing incentives that result in a higher percentage of highly qualified officers applying for the AMSP.

First, eliminate the requirement for AMSP graduates to hold Branch Qualifying (BQ) positions. Officers who have not met the optimum timing for CGSC attendance are warned that attendance of AMSP will possibly or definitely eliminate them from BQ prior to their lieutenant colonels promotion board. Few officers take this risk and decline to apply to AMSP. Second, automatically guarantee AMSP graduates a slot at senior service school. This will increase the probability of promotion to colonel and motivate more applicants for the AMSP. Finally,

¹⁴⁹ This does not take into account any academic break periods.

eliminate Personnel Command (PERSCOM) control over who gets to attend AMSP. Despite the Order of Merit List (OML) PERSCOM ultimately gets to select who attends AMSP. This results in the selection of lower qualified personnel to attend AMSP. PERSCOM should not have this power to select the future leaders of the Army based on present needs of the branch. By implementing these items, AMSP would be better able to get the highest quality officers to apply and therefore be able to select the most appropriate officers for AMSP attendance.

Recommendation 8: CGSOC and AMSP should implement a merit based follow-on assignment system.

Rational: The goal of this is to increase the academic rigor and the raise the level of effort students exert academically in CGSOC and AMSP. Under the current assignment system, students are allowed to interview for their follow-on assignments with divisions and corps as well as other duty assignments. This system does not necessarily match the quality and qualifications of the officer with the assigned position. Furthermore, no consideration, reward, or emphasis is placed on student academic achievement in either CGSOC or AMSP. Certainly, in CGSOC, and to a significantly lesser degree in AMSP, this fosters a less than highly motivated attitude towards education and academic achievement. This serves to lower the expectations and standards demanded of students and decreases the level of education received. One way to reverse this trend is through the institution of a merit based assignment system.

This system would revolve around an OML generated as a composite assessment of student achievement during the course. Several factors should be included in this assessment. Of the most significant weight should be the level of academic achievement. Other areas should include officership, leadership, and physical fitness. Once CGSOC or AMSP generated the OML, it could be used in one of several ways.

One way is that certain positions on the OML receive specific assignments. As an example, the top graduates would go to be: a presidential aide, special assistant to the Chairman, Joint Chiefs of Staff, special assistant to the Army Chief of staff, etc. Another way would be that the

student's place on the OML would determine his order in picking from the assignments available. The higher one is on the OML, the higher the likelihood of being able to get a highly desirable assignment based on job or location. The third option is for PERSCOM to use the OML as one of its significant inputs as it makes assignments based on branch requirements, officer qualifications, and the officer's desires. The resulting aim is to significantly raise the level of effort and the seriousness with which students approach their studies during CGSOC and AMSP. Likewise, the academic rigor found in each of these programs could be raised thus ensuring that graduates truly received a useful and quality education during their time at Fort Leavenworth.

These recommendations were derived as a result of a comparison between the *Führungsakademie* Education System and the American Professional Military Education System. All of these recommendations are provided with the goal towards improving the quality of professional military education within the American military. Germany clearly views the education of her military officers who are selected for attendance at the *Führungsakademie* for the National General/Admiral Staff Officers Course as of significant importance. As a result, the *Bundeswehr* makes a considerable investment in manpower, money, and time. The resulting educational system is one whose quality should be examined by those who wish to improve their own country's professional military education.

America has reaped the benefit of quality military education. A sterling example of this is the US Army and Navy's officer education system in the 1920 and 1930's. The education of students in the classroom during these two decades produced a well-educated officer corps cadre capable of leading America to victory through their efforts on the battlefield as commanders and off the battlefield as capable staff officers. As in World War II, American victory in future conflicts will largely depend on the education of its officer corps today. As the complexity of warfare continues to increase, highly educated leaders, whether commanders or staff officers, within the officer corps will be needed to successfully employ American military forces and win America's wars in the 21st Century. To do this, each military service and the joint force must make a

significant investment of human, financial, and time resources to properly educate the top echelon of the officer corps. To choose not to make this investment could seriously imperil America's ability to win its next war.

APPENDIX 1

*Kriegsakademie Curriculum Comparison*¹⁵⁰

Class	Year			
	1871	1882	1888	1912
	Class Hours Per Week			
First Year				
Formal Tactics	4	4	4	4
Military History	2	2	3	4
Arms and Ordnance	3	4	3	1
Field Fortifications	2	3	3	0
Mathematics	9	7	4	6
History	4	4	3	3
Geography	4	4	0	1
Physical Geography	2	2	2	0
Conversational French	6	6	6	6
Conversational Russian	2	6	6	6
English	0	0	0	6
Japanese	0	0	0	10
History of Established Army Organization	0	0	1	0
Physics	0	0	2	0
Naval Warfare	0	0	0	1
Military Justice	0	0	0	1
Military Hygiene	0	0	0	1
Weekly Hour Totals*	36	36	23-25	19-23
Second Year				
Applied Tactics	4	4	4	3
Military History to 1815	2	5	4	4
Permanent Fortification	2	3	0	2
Military Surveying	1	2	2	1
Military Geography	4	4	2	0
Military Administration	1	2	0	0
Mathematics	6	4	4	5
History	4	4	3	3
Introduction to the History of Philosophy	2	2	0	0
Experimental Physics	4	4	2	0
Conversational French	6	6	6	6
Conversational Russian	2	6	6	6
English	0	0	0	6
Japanese	0	0	0	6
Communications	0	0	2	2
Military Justice	0	0	1	0
Military Hygiene	0	0	1	0
General Staff Service	0	0	0	3
Constitution, Admin., Civil Law, and Finance	0	0	0	1

¹⁵⁰ Stephen E. Clemente, *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914* (New York: Greenwood Press, 1992), 176-180. Table derived from Clemente's analysis of course composition.

Weekly Hour Totals*	36	40	25	24-25
Class	Year			
	1871	1882	1888	1912
	Class Hours Per Week			
Third Year				
Military Justice	0	1	0	0
Military Hygiene	1	1	0	0
Military History from 1815	3	6	4	4
Siege Warfare	2	3	3	3
General Staff Service	1	4	4	3
Mathematics	2	4	3	0
Geodesy	3	3	3	0
History of Literature	2	2	0	0
History of Philosophy	1	0	0	0
General History to 1840	2	4	3	2
Chemistry	4	3	2	0
Conversational French	4	4	6	4
Conversational Russian	2	6	6	6
English	0	0	0	4
Japanese	0	0	0	6
Administration and Law	0	0	2	0
Tactics	0	0	2	3
Surveying (with astronomical plotting)	0	0	0	4
Weekly Hour Totals*	36	38	21	19-21

* Total Weekly Hours reflects required curriculum. Students were only required to take one foreign language and several electives were allowed during the course.

APPENDIX 2

Führungsakademie Questionnaire¹⁵¹

Curriculum

Subjects taught

To what level are the courses taught? (Undergraduate, graduate?) (Bloom's Taxonomy)
Is the trend to narrow subjects to more a more military nature?

Service specific classes

What percentage of the first year's academics is single service?
What percentage of the second year's academics is single service oriented?
What are the percentages for strategic/operational/tactical levels during the first year?
What are the percentages for strategic/operational/tactical levels during the second year?
What method(s) is used to interact between service and Führungsakademie to ensure service educational needs are being met? (regularly scheduled meetings, liaison officers)
How long does it take to incorporate a services request for a change to the curriculum?
What method(s) are used to determining the curriculum and instructional effectiveness in meeting individual service needs and requirements?

Joint service focus classes

What percentage of the first year's academics is joint service?
What percentage of the second year's academics is joint service oriented?
What is the method (s) of interaction between joint military elements and Führungsakademie to ensure joint service educational needs are being met?
What is the method and how rapidly can the FA incorporate joint service requested curriculum changes?
What is the method of determining curriculum and instructional effectiveness in meeting joint service needs and requirements?

Curriculum administration

Who has responsibility for the curriculum?
What are the procedures required to change the curriculum?
How much freedom do individual instructors have to modify their class curriculum?

Curriculum review process

What is the method and timing of curriculum update reviews? Is this a fixed committee?
What are the methods for introduction of change recommendations?
Does the FA use student critiques to modify the curriculum? What is the frequency of these critiques? (end of each course, end of year, graduation)
Does the FA use faculty critiques to modify the curriculum?
External curriculum support

Does the FA receive any civilian education support in development or modification of the curriculum? (civilian courseware or civilian faculty consultants)

¹⁵¹ These are the questions developed and used by the author as a basis for the interviews conducted with the Führungsakademie faculty, staff and students.

Is there any external or independent curriculum review conducted? If so, by whom and how often?

Books and Materials

Briefly describe the types and quality of instructional material used? (commercially produced textbooks, military produced literature, commercial or military produced software, copies versus originals)

How are class materials distributed to the students? (in bulk, prior to each subject, central distribution point)

What is the policy on student retention of materials? Do they get to keep their materials?

Travel

What is the type and amount of travel specified in curriculum?

Non-academic curriculum

What is the student physical activity policy? (mandatory PT or sports)

What is the student social activity policy?

What are the extra curricular opportunities and expectations for the students? (clubs, etc)

Faculty and Staff

Faculty administrative structure

Faculty demographics

How many military faculty? (Raw number and percentage)

Are these positions dictated by regulation? (can you have a civilian tactics instructor for instance)

How many civilian faculty? (Raw number and percentage)

How many non-permanent guest faculty? (guest lecturers, on loan from civil university)

What is the range of student to faculty ratios for the classes?

Faculty selection and recruitment

What is the method of selection and recruitment of faculty?

Is it true that GS officers teach GS officers?

Assignment of faculty

What is the method and policy for assignment of faculty positions? (Is each position identified by a very specific job description for education, experience, and rank?)

Tenure of faculty

What is the policy for faculty tour length?

Academic development

What are the pre-course academic development policy and procedures? (What must a new instructor do before he is turned loose in class?)

What are the continuation training policy and requirements? Is periodic refresher training required?

Faculty performance assessment

What are the faculty academic performance assessment policy and procedures? How is the faculty rated and quality control maintained?

What are the faculty officership performance assessment policy and procedures?

Academic quality of faculty

Are there any special academic credentials required of the faculty?

Does a faculty member have to have demonstrated teaching skill prior to being selected as an FA instructor?

What are the operational, command, and staff experience requirements for faculty?

Rank

Is there a policy for rank of faculty in specific jobs?

Role Modeling

What are the policy and procedures for role modeling, mentorship by faculty to students?

Is there a formalized program, faculty academics or training, etc?

Extracurricular faculty requirements

What is the policy on faculty academic research and publishing expectations? Are they expected to publish in military journals, textbooks, etc?

What are the normal external taskings placed on faculty members? How often are the faculty gone on temporary duty?

How many internal additional duties does a faculty member have? Is this seen as too little or too much required of the faculty?

Post Führungsakademie faculty careers

What is the policy for reassignment of faculty upon their completion of their FA duty?

What are the normal job expectations for a former FA faculty member? Is he still upwardly mobile within his service and the Bundeswehr?

How does a former FA faculty member fair in promotion and command opportunities as compared to other GS officers and non-GS officers?

Staff support to faculty

What kind of and how many technical support personnel does the FA have? Is this too few, too many, enough?

What kind of and how many Administrative support personnel does the FA have? Is this too few, too many, enough?

What is the selection policy for staff? As rigorous as for faculty?

How does the staff quality compare to line units, service HQ, MOD?

Instructional Methodology

What types of instruction are used at the FA?

What is the level of academic rigor at the FA? Comparable to civil university, hardest most demanding course in military, post graduate work?

Does the school purposefully seek to maintain a high level of academic rigor? (Old KA)

Do students feel stress over the expected level of academic performance either in quality or quantity of work?

Level of learning in the cognitive domain

Using Bloom's educational taxonomies scale what are the FA class goals and objectives?

Level of retention

What are the course standards and objectives for levels of material retention by the students? Are their different levels?

Development of professional attitudes

What are the goals and objectives for professional attitude development?

Educational Goals and Objectives

Are their stated Individual service educational goals and objectives?

What are the officership goals and objectives of the FA?

What are the leadership goals and objectives of the FA?

What are the staff officer goals and objectives?

What are the personal goals and objectives for the individual officer at the FA?

Joint Education

What are the goals and objectives for joint service education?

What are the methods of joint service education? Classroom, Exercise, Travel

What are the student/Faculty ratios?

What are the expectations of graduate capabilities in a joint environment?

Joint Service Curriculum

What method(s) of interaction between joint military elements and Führungsakademie to ensure joint service educational needs are being met?

Student Assessment**Selection assessment**

What is the method used to select students for attendance at FA?

Academic assessment methods

What examination methodology is used at the FA? Types, quantity and rigor of testing

What is the grading methodology and criteria used?

How are standards of academic performance used?

What is the policy of individual student grades? On each specific turn in requirement and on the course in general?

What is the order of merit methodology used by the FA?

Non-academic assessment policy

What is the types and standards for non-academic assessment?

Faculty role in student assessment

What methodology and policy is used by faculty to assess student performance?

Policy of reward for achievement

Are there academic achievement rewards for the students?

Is a student's achievement significant in his post graduation career? How much weight does this carry for each student?

Post graduation assessment

Is there a methodology used to assess graduate performance expectations versus actual performance?

Educational Support**Funding of Führungsakademie**

What is the FA's priority of funding within MOD? Who does the FA belong to for budget issues?

What is the timeliness and responsiveness of supporting agency to budget requests?

Support from outside agencies

What support is received from non-military governmental agencies?

What support is received from military agencies? Airlift, tours, non-permanent technical, etc

What if any support is received from civilian educational institutions? Guest instructors, academic consulting, etc

Facilities

Do you consider the size of the classroom and exercise facilities appropriate and conducive to obtaining the desired educational goals?

Rate the quality of facility compared to other Bundeswehr facilities?

Rate the FA technology support through computers, audio/visual equipment, etc.

Rate the FA's proximity to supporting/supported military and civilian institutions?

Is it good or bad to now not be in or near Berlin or Bonn?

Research Resources

Rate the library as compared to other German military libraries, civilian libraries?

Rate the library's technological resources (computers, educational database connectivity, etc.) as compared to other military libraries and civilian universities?

APPENDIX 3

*Führungsakademie Army Student Trip Summary*¹⁵²

Trip Name	Trip Description	Trip Duration (approximate)
Luftwaffe	Visit to Air Force to observe facilities, equipment, training and exercises	1
Navy	Visit to Navy to observe facilities, equipment, training and exercises	1
Army School	Visit to army branch and enlisted training schools	3
Terrain Walk	Students visit area where a majority of their service specific simulation exercises will be conducted to perform terrain familiarization and appreciation tours	2
France	Visit to French army facilities and schools to observe equipment, training and exercises	1
Berlin 1	Visit governmental, Ministry of Defense and historically significant sights to receive briefings and instruction	1
Berlin 2	Students visit Army Staff for service specific informational briefings and instruction in the military budget process	1
Defense Industry	Students travel to defense industry, an aviation school and Hamburg airport to observe defense industry and logistics facilities and functions	1
NATO	Visits to each level of NATO Headquarters to familiarize students with NATO operations at its various levels	1
Southern Trip	Students visit various levels of NATO and national military headquarters throughout the Mediterranean area	1
Southern Germany	Students visit German military intelligence and national intelligence facilities located in southern German	1
USA	Students visit various military installations to observe schools, training, headquarters and exercises throughout the US as well as US national military facilities and historic sites in the Washington DC area	2
		16 Weeks Total
Optional Trips		
Exercise	Selected students participate in various national, multi-national and NATO school and field exercises	1
Prairie Warrior	Selected students participate in US Army Command and General Staff College Exercise Prairie Warrior	2
Staff College Exercise	Students participate in a combined four nation (United Kingdom, France, Italy, and Germany) staff college combined exercise	1

¹⁵² *Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001* (Hamburg, Germany: Führungsakademie der Bundeswehr, 20 September 2001). Hauptmann (Captain) Jesko Peldszus, German Army, FüAk GSOC 2000 student, interview by author 29 Nov 2001. This list shows army officer trips. Luftwaffe and Navy officers participate in a similar schedule of trips.

APPENDIX 4

The Chairman, Joint Chiefs of Staff (CJSC) has established guidance and standards for the accreditation of US military joint education schools and courses. These are embodied in the CJSC's Process for Accreditation of Joint Education (PAJE). Within the PAJE are the six standards by which educational programs are assessed. The current standards (as of December 2001) are listed below.

Standard 1. Develop joint awareness, perspective, and attitudes. The Chairman's stated learning areas and objectives for JPME (Enclosure C) are to prepare graduates to operate at appropriate levels of war in a joint environment and to generate quality tactical, operational, and strategic thought from a joint perspective. Institutions' mission, goals, and objectives should reflect joint educational requirements to ensure that students are exposed to appropriate joint attitudes while pursuing the PJE curriculum. Reference I (also see glossary—Taxonomy of the Affective Domain) offers a widely used categorization of attitude-level development and value formation that can be used to evaluate institutional effectiveness in performing this function. The goal for PJE is to bring students to the affective domain's valuing level with respect to joint attitudes and perspectives. Course objectives should include the development of joint awareness and attitudes. Student and faculty ratios and student seminar mix should meet specified requirements to ensure a quality joint learning experience. Another effectiveness measure is faculty, staff, and student awareness of the joint mission, goals, and curriculum objectives of the institution.

Standard 2. Employ predominately active and highly effective instructional methods for the subject matter and desired level of learning. Active involvement of students in the learning process promotes retention, deeper comprehension, and development of professional attitudes. Student involvement in learning should be encouraged. Methodologies should be appropriate for the domain and desired levels of learning. Courses and lessons should be planned and conducted to motivate learning in all students.

Standard 3. Assess student achievement. Each institution should aggressively assess its students' performance and determine the degree to which instructional methods achieve PJE goals and objectives. Educational goals and objectives should be clearly stated, attainable, measurable by defined institutional standards. Assessment tools should relate directly to desired learning outcomes.

Standard 4. Support the needs of the joint community. Institutions should conduct surveys of graduates and their supervisors to determine curriculum and instructional effectiveness. Results of these analyses should be used to refine or develop curricula relevant to the requirements of the joint community. Curriculum evolution should reflect changing realities and should be documented.

Standard 5. Conduct a quality faculty recruitment, selection, assignment, and performance assessment program. Faculty should have the academic credentials,

teaching skills, and experience in joint matters needed to teach the applicable PJE. Faculty roles and responsibilities should be clearly documented. Institutions should hold faculty accountable for clearly defined and measurable performance criteria and standards.

Standard 6. Conduct faculty development programs for improving instructional skills and increasing subject matter mastery. Each institution should have a faculty development program to refine teaching skills, encourage thinking, maintain currency in subject areas, and improve instructional methods. Policy and manning should provide for research and publication by faculty members. Membership in professional educational or functional associations should be encouraged. Time and funds to attend conferences should be provided to promote academic vigor and allow faculty to acquire state-of-the-art currency in areas of expertise.

The Chairman, Joint Chief of Staff, Program for Accreditation of Joint Education standards are located at <http://www.dtic.mil/mil-ed/index.html>.

APPENDIX 5

The Chairman, Joint Chiefs of Staff (CJSC) has directed the Joint Staff J7 (Operational Plans and Interoperability Directorate) as the primary office of responsibility for joint educational matters by designating the largest share of JPME responsibilities to the J7 staff. Specific responsibilities within the J7 Directorate are as follows:

Director for Operational Plans and Interoperability, Joint Staff. In conjunction with the Director, Joint Staff, the Director, J-7, supervises the Deputy Director, Joint Staff, for Military Education, and ensures integration of JPME with joint training, exercises, and doctrine.

Deputy Director, Joint Staff, for Military Education. The VJ-7, designated the Deputy Director, Joint Staff, for Military Education, works for the Director, Joint Staff, and is responsible for the following:

- a. Assisting with policy formulation for coordinating the military education of the Armed Forces.
- b. Acting as the office of primary responsibility for the resolution of issues relating to the educational prerequisites for JSOs.
- c. Periodically reviewing and recommending PJE revisions.
- d. Administering the PAJE.
- e. Serving as secretary for the Military Education Coordination Committee (MECC). In this capacity, the MECC Secretary solicits agenda items from the CINCs; Directors of Defense agencies; Chiefs of Services; and the PME community.
- f. Coordinating, approving, and reallocating NDU JPME student body composition with NDU and the Services.
- g. Coordinating the Joint Staff review of NDU Program Objective Memorandum (POM) input before submission to the supporting Military Departments.
- h. Coordinating the periodic review of all JPME curricula for the Chairman of the Joint Chiefs of Staff.
- i. Coordinating for the Joint Staff on reports dealing with military education.

Above information is contained in the J7 Directorate Officer Professional Military Education Policy, Section B—Guidance and Responsibilities; Appendix C—Responsibilities located at <http://www.dtic.mil/mil-ed/omep/purpose.html>, accessed 31 Dec 01.

GLOSSARY

<i>Allgemeine Kriegsschule</i>	General War School
<i>Bundeswehr</i>	Federal Armed Forces
<i>EinsFüKdoBw (Einsatz Führungs Kommando der Bundeswehr)</i>	Joint Operations Headquarters, German Armed Forces
<i>i.G.(im Generalstabsdienst)</i>	in the General Staff service, e.g. a General Staff Officer
<i>Führergehilfenlehrgang</i>	commander's assistants' course
<i>Führungsakademie</i>	(directly translated) Leader Academy, the current Bundeswehr Command and General Staff Academy
<i>Grosser Generalstab</i>	Great General Staff
<i>Hauptmann</i>	Captain, O-3
<i>Heer</i>	Army
<i>Heeresakademie</i>	Army Academy
<i>Katalog der Feinziele und Lehrinhalte zum Lehrplan LGAN 2001</i>	Catalog of Specific Goals and Content of the Syllabus for National General/Admiral Staff Officers Course 2001
<i>Kriegsakademie</i>	War Academy
<i>Luftwaffe</i>	Air Force
<i>Marine</i>	Navy
<i>Oberst</i>	Colonel, O-6
<i>Oberstleutnant</i>	Lieutenant Colonel, O-5
<i>Truppenamt</i>	Troop Office
<i>Wehrkreis</i>	>.....Military District

BIBLIOGRAPHY

Books

- Addington, Larry H. *The Blitzkrieg Era and the German General Staff, 1865-1941*. New Brunswick, NJ: 1971.
- Aron, Raymond. *Clausewitz: Philosopher of War*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1985.
- Barnett, Correlli, ed. *Hitler's Generals*. New York: Grove Weidenfeld, 1989.
- Bronsart von Schellendorf, Paul. *The German General Staff*. London: 1908.
- Buchholz, Arden. *Moltke, Schlieffen and Prussian War Planning*. Providence, RI: Berg Publishers, Inc., 1993.
- Clemente, Steven, E. *For King and Kaiser! The Making of the Prussian Army Officer, 1860-1914*. New York: Greenwood Press, 1992.
- Dupuy, T.N. *A Genius for War: The German Army and General Staff, 1807-1945*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1977.
- Görlitz, Walter. *History of the German General Staff, 1657-1945*. New York: Praeger, 1953.
- Kitchen, Martin. *The German Officer Corps, 1890-1914*. Oxford: Clarendon Press, 1968.
- McCormick, David. *The Downsized Warrior: America's Army in Transition*. New York: New York University Press, 1998.
- Mellenthin, F.W. *German Generals of World War II*. Norman, OK: University of Oklahoma Press, 1977.
- _____. *Panzer Battles, 1939-1945*. London: 1955.
- Moncure, John. *Forging the King's Sword*. New York: Peter Lang, 1993.
- Nenniger, Timothy K. *The Leavenworth Schools: Postgraduate Military Education and Professionalization in the US Army, 1881-1918*. Westport, CT: Greenwood Press, 1978.
- Simons, William E., ed. *Professional Military Education in the United States: A Historical Dictionary*. Westport, CT: Greenwood Press, 2000.
- Smith, Dale, O. *The Eagle's Talons: A Military View of Civil Control of the Military*. Washington, D.C.: Spartan Books, 1966.
- Spires, David N. *Image and Reality: The Making of the German Officer, 1921-1933*. Westport, CT: Greenwood Press, 1984.
- Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. 6th ed. Chicago: University of Chicago Press, 1987.
- Van Creveld, Martin. *The Training of Officers: From Military Professionalism to Irrelevance*. New York: The Free Press, 1990.

Wedemeyer, Albert C. *Wedemeyer Reports!* Chicago: Henry Holt and Company, Inc., 1958.

US Army Command and General Staff College. *A Military History of the US Army Command and General Staff College. 1881-1963.* Fort Leavenworth, KS: US Army Command and General Staff College, 1964.

Articles

Carlson, Verner R. "Portrait of a German General Staff Officer," *Military Review*. (April 1990), 69-81.

Davis, Richard I. "The Case for Officer Professional Military Education," *Air Power Journal*. (Winter 1989), 34 – 35.

Davis, Richard L. "The Case for Officer Professional Military Education: A View from the Trenches," Maxwell AFB, AL: Air University. Internet, <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj89/davis.html>.

Holder, Leonard D, Jr., and Murray, Williamson. "Prospect for Military Education," *Joint Force Quarterly*, (Spring 1998): 81-90.

Hughes, Daniel J. "Abuses of German Military History," *Military Review*, (December 1986), 66-76.

Lewis, S.J. "Reflections on German Military Reform", *Military Review*, (August 1988), 60-69.

Sadoff, Laurence R. "Hans von Seeckt: One Man Who Made a Difference". *Military Review*. (December 1987), 76-81.

Skelton, Ike, "JPME: Are We There Yet?," *Military Review*, (May, 1992), X-X.

Starry, Donn A., "To Change an Army," *Military Review*, March 1983, 23.

Steele, William M. and Walters, Robert P., Jr. "Training and Developing Leaders in a Transforming Army," *Military Review*, (Sep-Oct 2001), 2-11.

Wass de Czege, Huba. "How to Change an Army," *Military Review*, (November 1984), X-X.

Williamson Murray, "The German Response to Victory in Poland: A Case Study in Professionalism," *Armed Forces and Society* 7:2 (Winter 1980): 285-98.

Thesis, Monographs, Reports, Websites and other Sources

Baggott, Christopher L., Lieutenant Colonel. "The School of Advanced Military Studies in the 21st Century." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, 1998.

Brooks, V.K., Major. "Knowledge is the Key: Educating, Training and Developing Operational Artists for the 21st Century." Monograph, School of Advanced Military Studies, Army Command and General Staff College, 1992.

- Führungsakademie der Bundeswehr*. Internet. <http://www.bundeswehr.de/bundeswehr/zmil/fueak.html>.
- Führungsakademie der Bundeswehr*, Welcome packet given to visiting guests, November 2001.
- Halder, Franz, *GeneralOberst a.D. Control of the German General Staff*. Europe: Headquarters United States Army, Europe, Historical Division, 1952. OKH Project #7, Chapter VIII.
- Hamilton, Robert E., Major, US Army. FüAk GSOC 2000, "German Armed Forces Staff College In-Progress Report #1, January 2001.
- Joint Staff, J7, Operational Plans and Interoperability Directorate. "Officer Professional Military Education Policy." Internet, <http://www.dtic.mil/mil-ed/index.html>.
- Marchall, *Oberstleutnant i.G.*, "Führungsakademie der Bundeswehr" April 1998, PowerPoint Presentation.
- Millotat, Christian O.E., *Oberst i.G. Understanding the Prussian-German General Staff*. Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 20 March 1992.
- Office of the Chairman, The Joint Chiefs of Staff, *CM 344-90. Military Education Policy Document* (Washington, D.C.: Office of the Chairman, The Joint Chiefs of Staff, 1 May 1990), p. I-1.
- Taylor, Bill. *Professional Military Education: An Asset for Peace and Progress*. Washington, D.C.: Center for Strategic and International Studies, 1997. Panel Report.
- Wedemeyer, Albert C. *German General Staff School*. Leavenworth, Kansas: US Army Command and General Staff School, 1938.

Interviews

- Bertel, Volker, *Oberst i.G.*, Faculty, Security and Strategy Department, *Führungsakademie der Bundeswehr*. Interview by author, 28 November 2001, Hamburg, Germany.
- Cooper, Jerry, Lieutenant Colonel, US Air Force, USAF Exchange Officer to the *Führungsakademie*. Interviewed by author, 27 November 2001, Hamburg, Germany.
- Dörre, Oliver, Major, German *Luftwaffe*, FüAk GSOC 2001 student. Interview by author, 28 November 2001, Hamburg, Germany.
- Eggering, William H., Lieutenant Colonel (Ret), US Army, FüAk GSOC 1980 student. Interview by author, 13 Dec 2001.
- Hamilton, Robert E., Major, US Army, FüAk GSOC 2000 student. Interview by author, 27 November 2001, Hamburg, Germany.
- Henkel, Frank, Major, German Army, Senior class student, *Führungsakademie*, Hamburg, Germany. Interview by author, 14 September 2001, Fort Leavenworth, Kansas.
- Lütje, Martin, *Oberstleutnant i.G.*, German Army, Director, Chief, G-3 Training and Instruction Planning, *Führungsakademie*. Interview by author, 26 November 2001, Hamburg, Germany.

Mahrarens, Soehnke, Major, German *Luftwaffe*, FüAk GSOC 2000 student. Interview by author 28 Nov 2001, Hamburg, Germany.

Muhl, Helmut. *Oberst i.G.*, German Army, German Army Liaison to Combined Arms Center, Ft. Leavenworth, KS and former *Führungsakademie* tutor/tactics instructor and senior instructor Department of Joint Military Operations. Interviews by author, 26 November 2001, Hamburg, Germany and 9 April 2002, Fort Leavenworth.

Padberg, Michael, *Oberst i.G.*, Director, *Luftwaffe* Department, *Führungsakademie der Bundeswehr*. Interview by author, 27 November 2001, Hamburg, Germany.

Peldszus, Jesko, *Hauptmann*, German Army, FüAk GSOC 2000 student. Interview by author, 29 November 2001, Hamburg, Germany.

Puckett, Cliff, Major, U.S. Air Force, FüAk. GSOC 2000 student. Interview by author, 27 November 2001, Hamburg Germany.

Quandt, Winfred, *Oberst i.G.* German Army, Director, Joint Operations and Training Department, *Führungsakademie*, Interview by author, 27 November 2001, Hamburg, Germany.

Renn, Pedro, *Oberstleutnant i.G.*, German *Luftwaffe*. Interview by author, 26 November 2001, Hamburg, Germany.

Schiller, Mark E., Lieutenant Colonel, U.S. Army Liaison Officer to the *Bundeswehr Führungsakademie*, Hamburg, Germany. Interviews by author, 10 Sep 2001, Fort Leavenworth, Kansas and 27 November 2001, Hamburg, Germany.

Schneider, Markus, Major, German Army, FüAk. GSOC 2000 student. Interview by author, 26 November 2001, Hamburg, Germany.

Vollmer, Jörg K.W., *Oberstleutnant i.G.*, German Army, Current Advanced Operational Art Studies Fellow, Fort Leavenworth, KS and previous Director, Exercise Branch, *Bundeswehr Führungsakademie*, Hamburg, Federal Republic of Germany. Interviews by author, 28 August 2001 and 5 November 2001, Leavenworth, Kansas.

Wass De Czege, Huba, Brigadier General (Retired), US Army. Interview by author, 31 Mar 2002, Leavenworth, Kansas.